# CULTURAL RESOURCES SURVEY OF THE TAXAHAW 115kV TRANSMISSION LINE, LANCASTER COUNTY, SOUTH CAROLINA

## CHICORA RESEARCH CONTRIBUTION 401

# CULTURAL RESOURCES SURVEY OF THE 115KV TAXAHAW TRANSMISSION LINE, LANCASTER COUNTY, SOUTH CAROLINA

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# ABSTRACT

This report provides the results of a cultural resources investigation of a 6.25 mile transmission line situated in the east central portion of Lancaster County. The study was conducted by Dr. Michael Trinkley of Chicora Foundation for Mr. Tommy Jackson of Central Electric Power Cooperative and is intended to assist this client comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The corridor is to be used by Central Electric Power Cooperative for the construction of the Taxahaw transmission line. The proposed corridor will start near a previously surveyed substation site and run southeast, intersecting an existing transmission line.

The proposed route will require the clearing of the corridor, followed by construction of the proposed transmission line. These activities have the potential to affect archaeological and historical sites that may be in the project corridor. For this study an area of potential effect (APE) 0.5 mile around the proposed transmission line was assumed.

Lancaster County has a comprehensive architectural and historical survey in 1986 and that study identified seven numbered sites in the project APE (11.018, 11.019, 12.024, 12.025, 12.035, 12.036, and 12.065). All were previously determined not eligible for inclusion on the National Register of Historic Places by the State Historic Preservation Office. An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology found no previously recorded sites in the APE.

The archaeological study of the corridor incorporated shovel testing at 100-foot intervals along the center line of the proposed corridor, which had been cut and staked at the time of this investigation. All shovel test fill was screened through ¼-inch mesh and the shovel tests were backfilled at the completion of the study. A total of 330 shovel tests were excavated in the survey corridor.

Four archaeological sites (38LA463-466) were identified as a result of these investigations. Two sites (38LA463 and 38LA465) include both prehistoric and historic remains, one site contains only prehistoric remains (38LA464), and the final site exhibits only a sparse scatter of historic artifacts (38LA466). Each site is recommended not eligible for the National Register.

A survey of public roads within 0.5 mile of the survey area was conducted in an effort to identify any architectural sites over 50 years old that also retained their integrity. No additional structures beyond those previously recorded by the 1986 survey were found. Of the seven previously recorded sites all were still present except for 12.025, which has been demolished and entirely removed from the landscape. In addition, 12.024 was no longer standing, but is now in ruins.

It is possible that archaeological remains may be encountered in the project area during construction. Construction crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take

place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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# INTRODUCTION

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy L. Jackson of Central Electric Power Cooperative. The work was conducted to assist Central Electric Power Cooperative comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project site consists of a 6.25-mile corridor to be used for the Taxahaw 115kV Transmission Line in east central Lancaster County (Figure 1). The project runs roughly northwest-southeast, beginning at the Taxahaw Transmission Station, previously surveyed for the Lynches River Electric Cooperative (Trinkley and Southerland 2003), on Joshua Tree Road (S-1185) between Taxahaw Road (S-123) and SC 522. The line will extend across SC 522 and parallel Logging Road east-southeast for approximately 7,500 feet before turning to the southeast and crossing Logging Road. It will then continue for 14,800 feet, crossing a tributary of Flat Creek, Pleasant Road (S-84), a second tributary of Flat Creek, and then Cilders Creek. The proposed line will turn to the east for about 1,600 feet, and then turn again to the southeast. This last leg, about 9,000 feet in length, crosses Mining Road (S-86), a tributary of Lick Creek, and terminates at an existing powerline easement crossing Duckwood Road (S-204).

The corridor exhibits variable topography, crossing ridge tops, ridge side slopes, and low creek areas. Much of the corridor is heavily eroded and the area throughout is in woods.

The proposed corridor, as previously mentioned, is intended to be used as a transmission line. Landscape alteration, primarily clearing and construction, including erection of poles, will damage the ground surface and any archaeological resources that may be present in the survey area. Construction and maintenance of the transmission line may also have an impact on historic resources in the project area.

The project will not directly effect any historic structures (since none are located on the survey corridor), but the completed facility may detract from the visual integrity of historic properties, creating what some consider discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) 0.5 mile radius around the proposed corridor.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Lancaster County.

We were requested by Mr. Tommy L. Jackson of Central Electric Power Cooperative to conduct the cultural resource study in late 2003, with the field investigations conducted by Ms. Nicole Southerland and Mr. Tom Covington on February 23 through February 27. The architectural survey and evaluations were conducted by Dr. Michael Trinkley at this same time.

These investigations incorporated a review of the site files at the South Carolina Institute of Archaeology and Anthropology. As a result of that work, no archaeological sites were found within a 0.5 mile area of potential effect (APE). This of course does not mean that

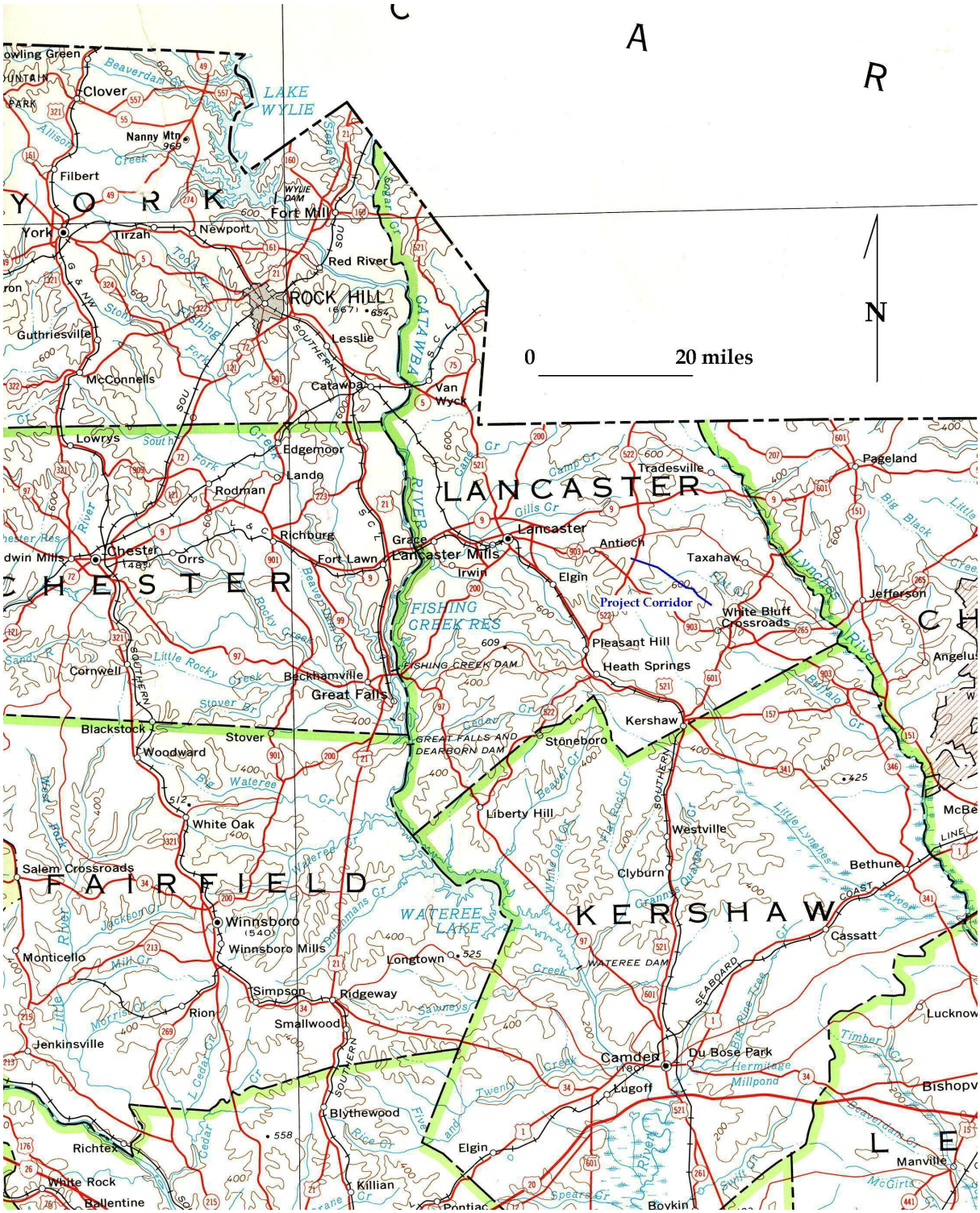


Figure 1. Portion of the 1:500,000 scale USGS *State of South Carolina* map showing the project corridor in east central Lancaster County.

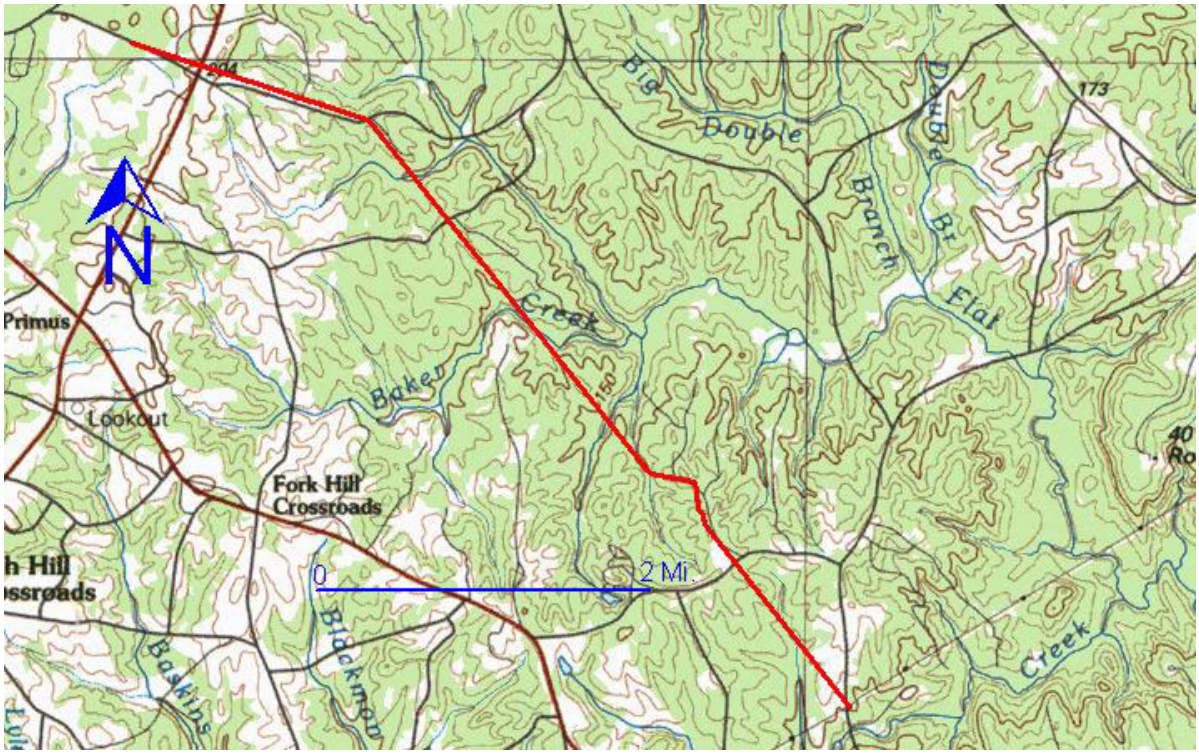

Figure 2. Portion of the 1:100,000 USGS Lancaster topographic map showing the project corridor.

no sites exist, only that no previous archaeological studies have been conducted in this portion of Lancaster County.

The South Carolina Department of Archives and History GIS was consulted to check for any NRHP buildings, districts, structures, sites, or objects in the study area. No properties in or near the project area have been determined eligible for the National Register of Historic Places. However, a comprehensive architectural and historical survey of Lancaster County was conducted in 1986 (Schneider and Jackson 1986) and this study identified seven numbered sites in the project APE (11.018, 11.019, 12.024, 12.025, 12.035, 12.036, and 12.065). The field survey maps also identified four further structures that, while noted, were not recorded. These were identified as a "barn," "40s ruin," "ruin," and structure type "E." All of these structures were evaluated as not eligible for inclusion on the National Register of Historic Places.

During this study, each of these 11 identified structures was re-evaluated given the age of the original Lancaster study. In addition, the accessible roads were driven, looking for any structures that might be potentially eligible but had not been originally identified.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files and at the South Caroliniana Library.

The archaeological survey revealed four archaeological sites – 38LA463-466. These sites are recommended not eligible for the National Register of Historic Places.

The architectural survey of the APE, designed to identify any structures over 50 years in age that retain their integrity and that are potentially eligible for the National Register of Historic Places revealed no such structures. No previously unexamined structures were noted

and, in fact four of the 11 are no longer present and a fifth (12.024) is now in ruins. All of the standing structures were photographed and are included in this study.

Report production was conducted at Chicora's laboratories in Columbia, South Carolina on March 1 and 2, 2004. The only photographic materials associated with this project are color or digital prints, which are not archival. The negatives and prints for these photographs are retained by Chicora Foundation. All other field notes and the resulting collections will be curated at the South Carolina Institute of Archaeology and Anthropology.

# ENVIRONMENTAL BACKGROUND

**Physiographic Province**

The project area is situated in east central Lancaster County. The corridor runs from the vicinity of Union and Antioch Acres southeasterly to the area of White Bluff. The northern third of the corridor runs along a ridge top, while the southern two-thirds are dominated by side slopes and crosses several drainages that flow easterly into the Lynches River (Figure 2).

Lancaster County, forming part of South Carolina's north central boundary with North Carolina, is separated from Chesterfield County to the east by Lynches River and from Fairfield, Chester, and York counties to the west by the Catawba River. To the south Lancaster County is bordered by Kershaw County (see Figure 1).

The county is located within two distinct physiographic provinces – the Piedmont Plateau and the portion of the Atlantic Coastal Plain known as the Sand Hills. All but the southeastern corner of the county is found within the Piedmont, separated from the coastal plain by an irregular line, known as the Fall Line, that extends north from the vicinity of Camden in Kershaw County to just west of Kershaw where it loops westward taking in Heath Springs and Pleasant Hill before turning back to the south and running into Kershaw County. There the Fall Line again tends northward, crossing U.S. 601 and extending to Taxahaw in Lancaster County. From Taxahaw it runs south, parallel to the west bank of Lynches River, for about 6 miles before crossing and extending back northward, taking in the town of Jefferson in Chesterfield County.

The project area is located exclusively in the Piedmont, stopping just short of the Fall Line and the Carolina Sand Hills. The topography is characterized by dissected plains consisting of the hills and valleys cut by creeks and rivers as they flow toward the coastal plain. Possibly part of the peneplain, the Piedmont is characterized by the dendritic stream patterns. It is also characterized by a range of metavolcanic, quartz, and quartzite materials used by Native Americans for stone tools.

About a mile to the south are the Carolina Sand Hills, an area of discontinuous hilly topography characterized by rounded hills with gentle slopes, moderate relief, and sandy soils. Although technically part of the Coastal Plain geology, the Sand Hills are distinct geographically. Much of the sand was blown into dunes during the Miocene, although weathered clays and very old river deposits are also present. In many cases these sandy deposits lie directly on the crystalline rocks of the Piedmont (Kovacik and Winberry 1987; Murphy 1995).

The project area, therefore, is in close contact with a range of physiographic regions. This provides a broad ecotone allowing access to a range of resources.

In the survey area the elevations range from about 450 to 700 feet above mean sea level (AMSL). Figure 3 profiles the corridor, revealing the rugged terrain, drainage areas, and especially the variation in grades. While there are areas with flat, level ridgetops, these are relatively uncommon. More prevalent are areas where grades range from 11 to 25% -- reflecting the steep, dissected topography of the Piedmont.

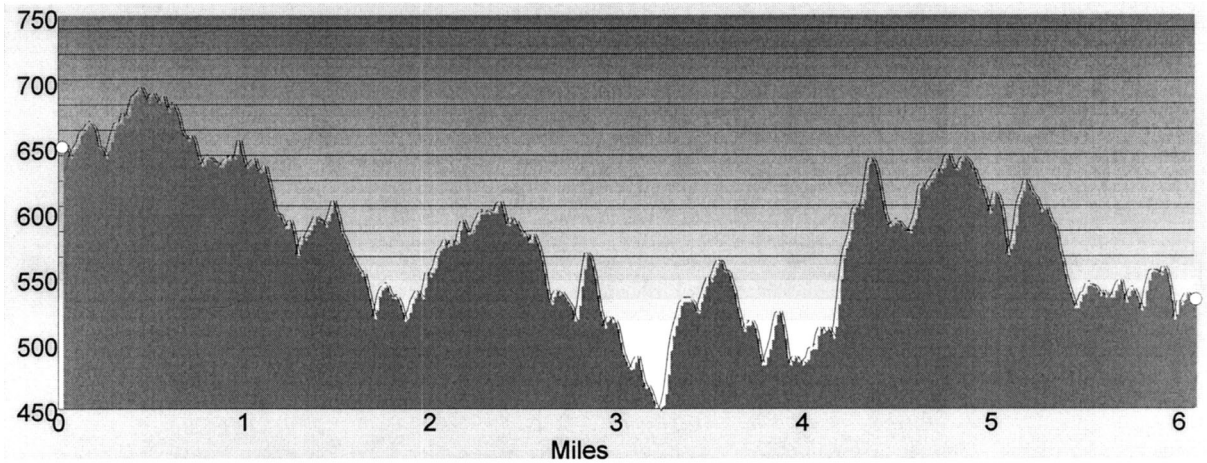


Figure 3. Profile of the survey corridor from northwest to southeast.

**Geology and Soils**

Most of the rocks of the Piedmont are gneiss and schist, with some marble and quartzite (Hasselton 1974). Some less intensively metamorphosed rocks, such as slate, occur along the eastern part of the province from southern Virginia into Georgia. This area, called the Slate Belt, is characterized by slightly lower ground with wider river valleys. Consequently, the Slate Belt has been favored for reservoir sites (Johnson 1970), as well as prehistoric occupation (see Coe 1964). In Lancaster County many of the Piedmont soils are weathered from argillites rich in silica and alumina. Other soils are formed in saprolite that weathered from crystalline rocks and "Carolina slates". Soils from the river floodplains formed in sediment that washed from the uplands of the Piedmont province.

The project crosses 13 different soil series and 22 soil types, itemized in Table 1. Of these 18 soils, accounting for 88.8% of the corridor, are classified as eroded or severely eroded. These soils exhibit losses ranging from 25% to 100% of the A horizon, often accompanied by gullies and galled areas. In some cases the erosion has progressed into the subsoil. Only three soils do not exhibit extensive erosion – two are found in bottomland contexts (Chewacla and Masada & Altavista), while the third is the Gills silt loam found on higher elevations.

Over 27% of the corridor exhibits slopes in excess of 10%and an additional 14% of the soils are found on slopes between 6 and 10%. With two-fifths of the survey tract on steep slopes it is not surprising that extensive erosion has been noted.

M.W. Lowry's *Reconnaissance Erosion Survey of the State of South Carolina*, conducted in 1934, characterized the project area as exhibiting moderate sheet erosion with occasional gullies. Given the more recent soil survey, it appears that conditions continued to deteriorate over the following 30 to 40 years, probably the result of intensive logging operations. Logging in the Piedmont will result in the loss of 0.36 tons of soil per acre per year and mechanical site preparation, perhaps used in the mid-1950s to convert the agricultural fields back to woods, might have resulted in the loss of nearly 6.7 tons of soil per acre per year (U.S. Department of Agriculture 1983:25).

Although classified by Trimble (1974:15) as being part of the Mixed Farming Area with generally low erosive land use, the project sits at the edge of the cotton plantation area that experienced very high erosive land use during the antebellum, with postbellum continuation. The study area apparently lost, on average, between 0.8 and 1.0 foot of soil (Trimble 1974:3).

Table 1.
Soils in the Project Corridor (from Rogers 1973)

| Soil | % | Comments |
|---|---|---|
| Appling fine sandy loam 2-6%, eroded | 4.7 | Ridges, 25-75% of A horizon eroded |
| Cecil clay loam 2-6%, severely eroded | 3.5 | Ridgetops and side slopes, all A horizon eroded |
| Chewacla soils | 4.7 | Deep, poorly drained bottomland soil |
| Enon loam2-6%, eroded | 1.8 | Side slopes |
| Enon loam 6-10%, eroded | 3.5 | Side slopes, gullies and galled areas common |
| Enon loam 10-25%, severely eroded | 0.6 | Along drainageways |
| Georgeville silt loam 2-6%, eroded | 15.3 | Ridges and side slopes |
| Georgeville silty clay loam 2-6%, severely eroded | 8.2 | Side slopes, all A horizon eroded |
| Georgeville silty clay loam 6-10%, severely eroded | 8.2 | Ridges and side slopes, gullies and galled areas |
| Gills silt loam 2-6% | 5.9 | Ridges and side slopes |
| Gills silt loam 2-6%, eroded | 1.2 | Broad ridges and side slopes, gullies |
| Goldsboro-Pickens complex 2-6% | 7.0 | Gullies up to 2-feet deep |
| Gullied land, Georgeville | 1.8 | Severely eroded, many gullies |
| Helena fine sand loam 2-6%, eroded | 2.3 | Ridgetops and side slopes |
| Herndon silt loam 2-6%, eroded | 1.8 | Broad side slopes |
| Herndon silt loam 6-10%, eroded | 0.6 | Broad side slopes, gullies, galled areas common |
| Herndon silty clay loam 6-10% severely eroded | 1.8 | Drainageways, all A horizon eroded |
| Masada & Altavista soils 2-6% | 0.6 | Low stream terraces |
| Pickens slaty silt loam 10-25% | 1.8 | Narrow ridges and side slopes, gullies present |
| Tatum loam 10-15%, eroded | 6.5 | Narrow ridges and side slopes |
| Tatum loam 15-25%, severely eroded | 4.1 | Narrow ridges |
| Tatum silty clay loam 10-25%, severely eroded | 14.1 | Narrow ridges and side slopes, gullies common |

The two most common soils found in the survey corridor are the Georgeville silt loams (15.3% of the corridor) and Tatum silty clay loams (14.1% of the corridor). The Georgeville soils, where preserved, exhibit a profile with an A horizon about 0.3 foot in depth consisting of a yellowish-brown (10YR5/4) silt loam. Below this is a B1t horizon of yellowish-red (5YR5/8) silt loam to a depth of 0.6 foot. The underlying B2t horizon consists of a red (2.5YR4/8) silt loam to a depth of 2.6 feet.

The Tatum silty clay loam exhibits an A horizon of 0.2 foot of light-brown (7.5YR6/4) silty clay loam. This overlies a B21t horizon of reddish-brown (5YR5/4) sand clay loam to a depth of 0.6 foot. The B22t horizon, to a depth of 1.7 feet, consists of a red (2.5YR5/6) sandy clay loam.

These data suggest that the corridor has probably gone through cycles of soil erosion and deposition, with erosion occurring during logging and cultivation, while soils likely built up during periods of forestation. Today we found that red clay (signifying the subsoil) would often be found within 0.1 to 0.3 foot of the surface.

In 1826 Robert Mills provided a very succinct description of the soils, noting that although they varied from "a rich loam to a barren sand," the "lands to the east and south of Cain Creek . . . are mostly stony and gravelly" while to the "north and west of Cain creek, the soil is much more fertile, generally clay and loam" (Mills 1826:596). This division along Cain Creek, between the fertile bottomland soils and the less fertile upland Piedmont and Sand Hills soils, is the exact same division between Trimble's Cotton Plantation Area (with high antebellum erosive land use and a postbellum continuation) and the General Farming Area (with its lower rate of erosion).

For many of the neighboring districts Mills expressed his concern over the treatment lands received. Less than 20 years later Edmund

Ruffin had a similar opinion of the sand hills and the wasteful cultivation of the land, yet it seems to have had little impact on the planters he met. He observed that:

> The lands through Richland, of middling quality, or rather below. Surface moderately undulating, & sandy mostly. Oak growth more in proportion to the pine than lower. No very good culture or land seen by me (Mathew 1992:261).

In spite of these early warnings, the South Carolina Department of Agriculture, Commerce, and Immigration, as late as 1907, found no reason to remark on the threat of erosion, noting only that "elevated flats can be brought to a high state of fertility by proper methods of farming" and that the soils are "superior for peanuts, sweet potatoes, sorghum, watermelons and the staples, oats, cotton, corn, and some wheat" (Watson 1907:255). Lancaster County boasted of only one cotton seed oil mill – about on par with the single mills operating in surrounding Chester, Chesterfield, Fairfield, Kershaw, and Sumter counties (Watson 1907:269, 288).

**Climate**

Elevation, latitude, and distance from the coast work together to affect the climate of South Carolina, including the Piedmont. In addition, the more westerly mountains block or moderate many of the cold air masses that flow across the state from west to east. Even the very cold air masses which cross the mountains are warmed somewhat by compression before they descend on the Piedmont and adjacent Sand Hills.

Consequently, the climate of Lancaster County is temperate. The winters are relatively mild and the summers warm and humid. Rainfall in the amount of about 46 inches is adequate, although less than in some neighboring counties. About 22 inches of rain occur during the growing season, with periods of drought not uncommon during the summer months. As Hilliard illustrates, these droughts tended to be localized and tended to occur several years in a row, increasing the hardship on those attempting to recover from the previous year's crop failure (Hilliard 1984:16). Perhaps the best wide-scale example of this was the drought of 1845, which caused a series of very serious grain and food shortages throughout the state. Rogers (1973:124) mentions two droughts in the Lancaster area during the first half of the twentieth century.

The average growing season is about 225 days, although early freezes in the fall and late frosts in the spring can reduce this period by as much as 30 or more days (Rogers 1973:125). Consequently, most cotton planting, for example, did not take place until early May, avoiding the possibility that a late frost would damage the young seedlings.

**Floristics**

Piedmont forests generally belong to the Oak-Hickory Formation as established by Braun (1950), while she classifies the Sand Hills as part of the Southeast Evergreen Forest Region. Regardless, the potential natural vegetation of the project area is the Oak-Hickory-Pine forest, composed of medium tall to tall forests of broadleaf deciduous and needleleaf evergreen trees (Küchler 1964). The major components of this ecosystem include hickory, shortleaf pine, loblolly pine, white oak, and post oak.

Although John Berry rightly comments that "a walk through the most xeric stages of the fall line sandhills would probably be very boring" dominated by turkey oaks, scrubby post oaks, and broad expanses of open sandy soil, the Piedmont – when not heavily affected by human interaction – appears more varied. In the submesic to mesic midslopes there are white oak, black oak, and red oak, along with blackgum, post oak, red maple, and various hickories. The understory will contain dogwood, red cedar, and various pines. The ridgetops,

Figure 4. Staked corridor through mixed pines and hardwoods typical of the project's upland areas.

Today, however, extensive cultivation followed by either abandonment or the planting of pine forests has created a very different environment. In some areas of the corridor the diversity has been replaced by monotonous uniformity. There are many areas of second growth – found around old house sites, in old fields, and taking over pastures. Throughout there is evidence of erosive land use.

especially those that are south and west facing or that have thin soils, tend to be xeric. There the dominant species will be pine, red cedar, blackjack oak, white oak, black gum, and hickories (Barry 1980:78-85).

Figure 5. Cut corridor down a side slope and into a bottomland area. Vegetation is primarily small, second growth hardwoods.

The project area, therefore, can exhibit considerable ecological diversity, further affected by the small creeks that cross through the corridor. There would also be shrub layers that are very attractive to a diverse range of mammals, including deer, opossum, and raccoon. It is this diversity that probably made the project area attractive to Native Americans, who saw the site area as providing a range of different environmental zones in close proximity.

# PREHISTORIC AND HISTORIC SYNOPSIS

## Prehistoric Overview

Overviews for South Carolina's prehistory, while of differing lengths and complexity, are available in virtually every compliance report prepared. There are, in addition, some "classic" sources well worth attention, such as Joffre Coe's *Formative Cultures* (Coe 1964), as well as some new general overviews (such as Sassaman et al. 1990 and Goodyear and Hanson 1989). Also extremely helpful, perhaps even essential, are a handful of recent local synthetic statements, such as that offered by Sassaman and Anderson (1994) for the Middle and Late Archaic and by Anderson et al. (1992) for the Paleoindian and Early Archaic. Only a few of the many sources are included in this study, but they should be adequate to give the reader a "feel" for the area and help establish a context for the various sites identified in the study areas. For those desiring a more general synthesis, perhaps the most readable and well balanced is that offered by Judith Bense (1994), *Archaeology of the Southeastern United States: Paleoindian to World War I*. Figure 6 offers a generalized view of South Carolina's cultural periods.

### Paleoindian Period

The Paleoindian Period, most commonly dated from about 12,000 to 10,000 B.P., is evidenced by basally thinned, side-notch projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Michie 1977; Williams 1965). Oliver (1981, 1985) has proposed to extend the Paleoindian dating in the North Carolina Piedmont to perhaps as early as 14,000 B.P., incorporating the Hardaway Side-Notched and Palmer Corner-Notched types, usually accepted as Early Archaic, as representatives of the terminal phase. This view, verbally suggested by Coe for a number of years, has considerable technological appeal.[1] Oliver suggests a continuity from the Hardaway Blade through the Hardaway-Dalton to the Hardaway Side-Notched, eventually to the Palmer Side-Notched (Oliver 1985:199-200). While convincingly argued, this approach is not universally accepted.

The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented toward the exploitation of now extinct mega-fauna" (Michie 1977:124). Survey data for Paleoindian tools, most notably fluted points, is somewhat dated, but has been summarized by Charles and Michie (1992). They reveal a widespread distribution across the state (see also Anderson 1992b:Figure 5.1) with at least several concentrations relating to intensity of collector activity. What is clear is that points are found fairly far removed from the origin of the raw material. Charles and Michie suggest that

[1] While never discussed by Coe at length, he did observe that many of the Hardaway points, especially from the lowest contexts, had facial fluting or thinning which, "in cases where the side-notches or basal portions were missing, . . . could be mistaken for fluted points of the Paleo-Indian period" (Coe 1964:64). While not an especially strong statement, it does reveal the formation of the concept. Further insight is offered by Ward's (1983:63) all too brief comments on the more recent investigations at the Hardaway site (see also Daniel 1992).

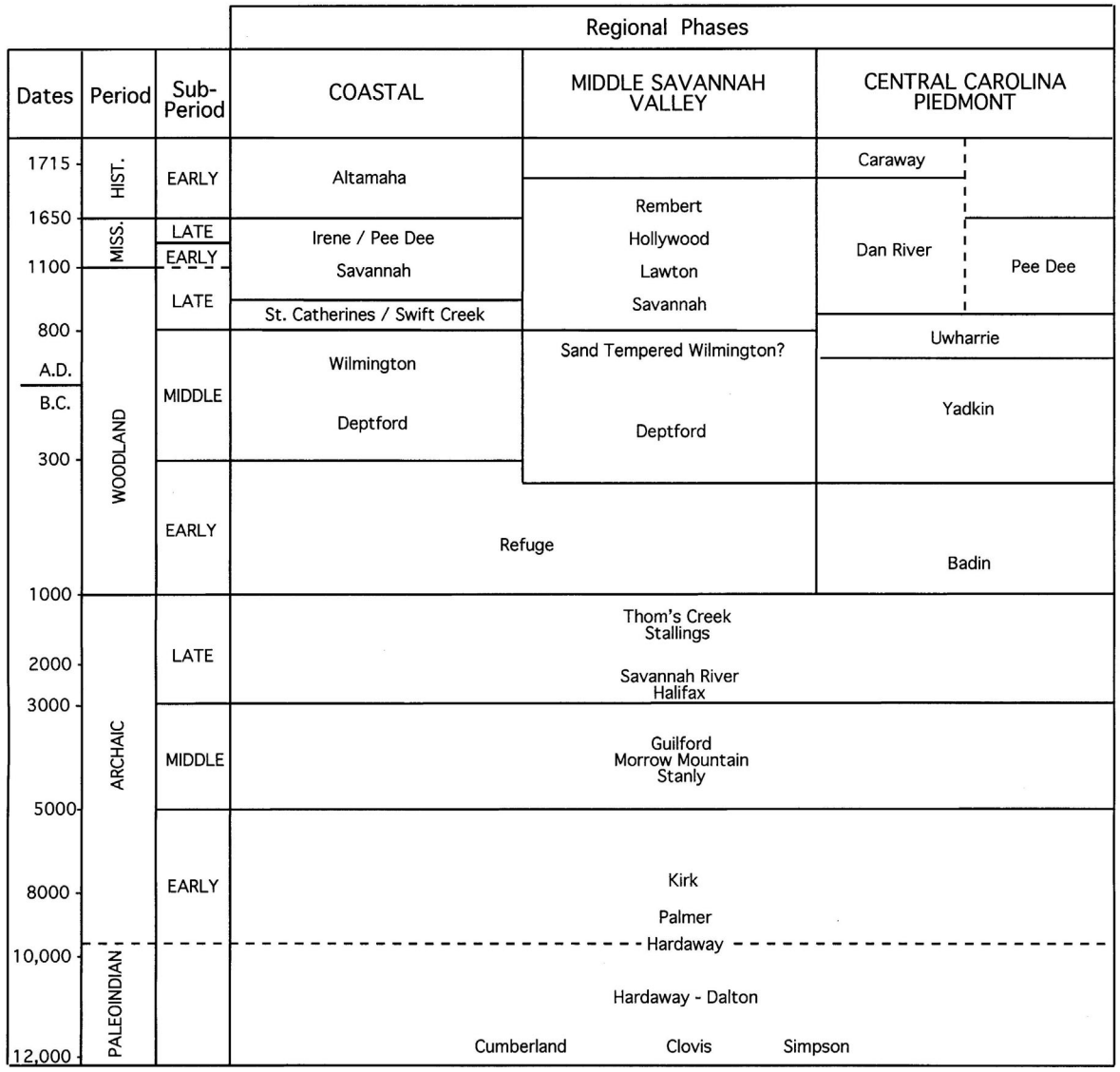


Figure 6. Generalized cultural sequences for South Carolina.

this may "imply a geographically extensive settlement system" (Charles and Michie 1992:247).

Although data are sparse, one of the more attractive theories that explains the widespread distribution of Paleoindian sites is the model tracking the replacement of a high technology forager (or HTF) adaptation by a "progressively more generalized band/microband foraging adaptation" accompanied by increasingly distinct regional traditions (perhaps reflecting movement either along or perhaps even between river drainages) (Anderson 1992b:46).

Distinctive projectile points include lanceolates such as Clovis, Dalton, perhaps the Hardaway, and Big Sandy (Coe 1964; Phelps 1983; Oliver 1985). A temporal sequence of Paleoindian projectile points was proposed by Williams (1965:24-51), but according to Phelps

(1983:18) there is little stratigraphic or chronometric evidence for it. While this is certainly true, a number of authors, such as Anderson (1992a) and Oliver (1985) have assembled impressive data sets. We are inclined to believe that while often not conclusively proven by stratigraphic excavations (and such proof may be an unreasonable expectation), there is a large body of circumstantial evidence. The weight of this evidence tends to provide considerable support.

Unfortunately, relatively little is known about Paleoindian subsistence strategies, settlement systems, or social organization (see, however, Anderson 1992b for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

**Archaic Period**

The Archaic Period, which dates from 10,000 to 3,000 B.P.[2], does not form a sharp break with the Paleoindian Period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited animal. Archaic period assemblages, exemplified by corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

Many researchers have reported data suggestive of a noticeable population increase from the Paleoindian into the Early Archaic. This has tentatively been associated with a greater emphasis on foraging. Diagnostic Early Archaic artifacts include the Kirk Corner Notched point. As previously discussed, Palmer points may be included with either the Paleoindian or Archaic period, depending on theoretical perspective. As the climate became hotter and drier than the previous Paleoindian period, resulting in vegetational changes, it also affected settlement patterning as evidenced by a long-term Kirk phase midden deposit at the Hardaway site (Coe 1964:60). This is believed to have been the result of a change in subsistence strategies.

Settlements during the Early Archaic suggest the presence of a few very large, and apparently intensively occupied, sites that can best be considered base camps. Hardaway might be one such site. In addition, there were numerous small sites which produce only a few artifacts – these are the "network of tracks" mentioned by Ward (1983:65). The base camps

[2] The terminal point for the Archaic is no clearer than that for the Paleoindian and many researchers suggest a terminal date of 4,000 B.P. rather than 3,000 B.P. There is also the question of whether pottery, such as the fiber-tempered Stallings ware, will be included as Archaic, or will be included with the Woodland. Oliver, for example, argues that the inclusion of ceramics with Late Archaic attributes "complicates and confuses classification and interpretation needlessly" (Oliver 1981:20). He comments that according to the original definition of the Archaic, it "represents a preceramic horizon" and that "the presence of ceramics provides a convenient marker for separation of the Archaic and Woodland periods" (Oliver 1981:21). Others would counter that such an approach ignores cultural continuity and forces an artificial, and perhaps unrealistic, separation. Sassaman and Anderson (1994:38-44), for example, include Stallings and Thom's Creek wares in their discussion of "Late Archaic Pottery." While this issue has been of considerable importance along the Carolina and Georgia coasts, it has never affected the Piedmont, which seems to have embraced pottery far later, well into the conventional Woodland period. The importance of the issue in the nearby Sand Hills, unfortunately, is not well known.

produce a wide range of artifact types and raw materials that has suggested to many researchers long-term, perhaps seasonal or multi-seasonal, occupation. In contrast, the smaller sites are thought of as special purpose or foraging sites (see Ward 1983:67).

Middle Archaic (8,000 to 6,000 B.P.) diagnostic artifacts include Morrow Mountain, Guilford, Stanly and Halifax projectile points. Much of our best information on the Middle Archaic comes from sites investigated west of the Appalachian Mountains, such as the work by Jeff Chapman and his students in the Little Tennessee River Valley (for a general overview see Chapman 1977, 1985a, 1985b). There is good evidence that Middle Archaic lithic technologies changed dramatically. End scrapers, at times associated with Paleoindian traditions, are discontinued, raw materials tend to reflect the greater use of locally available materials, and mortars are initially introduced. Associated with these technological changes there seem to also be some significant cultural modifications. Prepared burials begin to more commonly occur and storage pits are identified. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and the Carolinas, where axes, choppers, and ground and polished stone tools are very rare.

Among the most common of all Middle Woodland artifacts is the Morrow Mountain Stemmed projectile point that was originally divided into two varieties by Coe (1964:37,43) based primarily on the size of the blade and the stem. Morrow Mountain I points had relatively small triangular blades with short, pointed stems. Morrow Mountain II points had longer, narrower blades with long, tapered stems. Coe suggested a temporal sequence from Morrow Mountain I to Morrow Mountain II. While this has been rejected by some archaeologists, who suggest that the differences are entirely related to the life-stage of the point, the debate is far from settled and Coe has considerable support for his scenario.

The Morrow Mountain point is also important in our discussions since it represents a departure from the Carolina Stemmed Tradition. Coe has suggested that the groups responsible for the Middle Archaic Morrow Mountain (and the later Guilford points) were intrusive ("without any background" in Coe's words) into the North Carolina Piedmont, from the west, and were contemporaneous with the groups producing Stanly points (Coe 1964:122-123; see also Phelps 1983:23). Phelps, building on Coe, refers to the Morrow Mountain and Guilford as the "Western Intrusive horizon." Sassaman (1995) has recently proposed a scenario for the Morrow Mountain groups that would support this west-to-east time-transgressive process. Abbott and his colleagues, perhaps unaware of Sassaman's data, dismiss the concept, commenting that the shear distribution and number of these points "makes this position wholly untenable" (Abbott et al. 1995:9).

The controversy surrounding Morrow Mountain also includes its posited date range. Coe (1964:123) did not expect the Morrow Mountain to predate 6500 B.P., yet more recent research in Tennessee reveals a date range of about 7500 to 6500 B.P. Sassaman and Anderson (1994:24) observe that the South Carolina dates have never matched the antiquity of their more western counterparts and suggest continuation to perhaps as late as 5500 B.P. In fact they suggest that even later dates are possible since it can often be difficult to separate Morrow Mountain and Guilford points.

A recently defined point is the MALA. The term is an acronym standing for Middle Archaic and Late Archaic, the strata in which these points were first encountered at the Pen Point site (38BR383) in Barnwell County, South Carolina (Sassaman 1985). These stemmed and notched lanceolate points were originally found in a context suggesting a single-episode event with variation not based on temporal variation.

The original discussion was explicitly worded to avoid application of a typology, although as Sassaman and Anderson (1994:27) note, the "type" has spread into more common usage. There are possible connections with both the Halifax points of North Carolina and the Benton points of the middle Tennessee River valley, while the "heartland" for the MALA appears confined to the lower middle Coastal Plain of South Carolina.

The available information has resulted in a variety of competing settlement models. Some argue for increased sedentism and a reduction of mobility (see Goodyear et al. 1979:111). Ward argues that the most appropriate model is one that includes relatively stable and sedentary hunters and gatherers "primarily adapted to the varied and rich resource base offered by the major alluvial valleys" (Ward 1983:69). While he recognizes the presence of "inter-riverine" sites, he discounts explanations that focus on seasonal rounds, suggesting "alternative explanations . . . [including] a wide range of adaptive responses." Most importantly, he notes that:

> the seasonal transhumance model and the sedentary model are opposite ends of a continuum, and in all likelihood variations on these two themes probably existed in different regions at different times throughout the Archaic period (Ward 1983:69).

Others suggest increased mobility during the Archaic (see Cable 1982). Sassaman (1983) has suggested that the Morrow Mountain phase people had a great deal of residential mobility, based on the variety of environmental zones they are found in and the lack of site diversity. The high level of mobility, coupled with the rapid replacement of these points, may help explain the seemingly large numbers of sites with Middle Archaic assemblages. Curiously, the later Guilford phase sites are not as widely distributed, perhaps suggesting that only certain micro-environments were used (cf. Ward [1983:68-69] who would likely reject the notion that substantially different environmental zones are, in fact, represented).

Recently Abbott et al. argue for a combination of these models, noting that the almost certain increase in population levels probably resulted in a contraction of local territories. With small territories there would have been significantly greater pressure to successfully exploit the limited resources by more frequent movement of camps. They discount the idea that these territories could have been exploited from a single base camp without horticultural technology. Abbott and his colleagues conclude, "increased residential mobility under such conditions may in fact represent a common stage in the development of sedentism" (Abbott et al. 1995:9).

From excavations at a Sand Hills site in Chesterfield County, South Carolina, Gunn and his colleague (Gunn and Wilson 1993) offer an alternative model for Middle Archaic settlement. He accepts that the uplands were desiccated from global warming, but rather than limiting occupation, this environmental change made the area more attractive for residential base camps. Gunn and Wilson suggest that the open, or fringe, habitat of the upland margins would have been attractive to a wide variety of plant and animal species.

The Late Archaic, usually dated from 6,000 to 3,000 or 4,000 B.P., is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued to intensively exploit the uplands much like earlier Archaic groups with, the bulk of our data for this period coming from the Uwharrie region in North Carolina.

One of the more debated issues of the Late Archaic is the typology of the Savannah River Stemmed and its various diminutive forms. Oliver, refining Coe's (1964) original Savannah River Stemmed type and a small variant from Gaston (South 1959:153-157),

developed a complete sequence of stemmed points that decrease uniformly in size through time (Oliver 1981, 1985). Specifically, he sees the progression from Savannah River Stemmed to Small Savannah River Stemmed to Gypsy Stemmed to Swannanoa from about 5000 B.P. to about 1,500 B.P. He also notes that the latter two forms are associated with Woodland pottery.

This reconstruction is still debated with a number of archaeologists expressing concern with what they see as typological overlap and ambiguity. They point to a dearth of radiocarbon dates and good excavation contexts at the same time they express concern with the application of this typology outside the North Carolina Piedmont (see, for a synopsis, Sassaman and Anderson 1990:158-162, 1994:35).

In addition to the presence of Savannah River points, the Late Archaic also witnessed the introduction of steatite vessels (see Coe 1964:112-113; Sassaman 1993), polished and pecked stone artifacts, and grinding stones. Some also include the introduction of fiber-tempered pottery about 4000 B.P. in the Late Archaic (for a discussion see Sassaman and Anderson 1994:38-44). This innovation is of special importance along the Georgia and South Carolina coasts, but seems to have had only minimal impact in the uplands of South or North Carolina.

There is evidence that during the Late Archaic the climate began to approximate modern climatic conditions. Rainfall increased resulting in a more lush vegetation pattern. The pollen record indicates an increase in pine that reduced the oak-hickory nut masts that previously were so widespread. This change probably affected settlement patterning since nut masts were now more isolated and concentrated. From research in the Savannah River valley near Aiken, South Carolina, Sassaman has found considerable diversity in Late Archaic site types with sites occurring in virtually every upland environmental zone. He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system. While it is unlikely that this model can be simply transferred to the Sand Hills of South Carolina without an extensive review of site data and micro-environmental data, it does demonstrate one approach to understanding the transition from Archaic to Woodland.

**Woodland Period**

As previously discussed, there are those who see the Woodland beginning with the introduction of pottery. Under this scenario the Early Woodland may begin as early as 4,500 B.P. and continued to about 2,300 B.P. Diagnostics would include the small variety of the Late Archaic Savannah River Stemmed point (Oliver 1985) and pottery of the Stallings and Thoms Creek series. These sand tempered Thoms Creek wares are decorated using punctations, jab-and-drag, and incised designs (Trinkley 1976). Also potentially included are Refuge wares, also characterized by sandy paste, but often having only a plain or dentate-stamped surface (Waring 1968). Others would have the Woodland beginning about 3,000 B.P. and perhaps as late as 2,500 B.P. with the introduction of pottery that is cord-marked or fabric-impressed and suggestive of influences from northern cultures.

There remains, in South Carolina, considerable ambiguity regarding the pottery series found in the Sand Hills and their association with coastal plain and piedmont types.

In the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin.[3] This pottery is identified as having very fine sand in the paste with an

[3] The ceramics suggest clear regional differences during the Woodland that seem to only be magnified during the later phases. Ward (1983:71), for example, notes that there are "marked distinctions" between the pottery from the Buggs Island and Gaston Reservoirs and that from the south-central Piedmont.

occasional pebble. Coe identified cord-marked, fabric-marked, net-impressed, and plain surface finishes. Beyond this pottery little is known about the makers of the Badin wares and relatively few of these sherds are reported from South Carolina sites.

Somewhat more information is available for the Middle Woodland, typically given the range of about 2,300 B.P. to 1,200 B.P. In the Piedmont and even into the Sand Hills, the dominant Middle Woodland ceramic type is typically identified as the Yadkin series. Characterized by a crushed quartz temper the pottery includes surface treatments of cord-marked, fabric-marked, and a very few linear check-stamped sherds (Coe 1964:30-32). It is regrettable that several of the seemingly "best" Yadkin sites, such as the Trestle site (31AN19) explored by Peter Cooper (Ward 1983:72-73), have never been published.

Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least 1650 B.P. coexisted with this Triangular Tradition. The Yadkin in South Carolina has been best explored by research at 38SU83 in Sumter County (Blanton et al. 1986) and at 38FL249 in Florence County (Trinkley et al. 1993)

In some respects the Late Woodland (1,200 B.P. to 400 B.P.) may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500-700 years. From the vantage point of the Middle Savannah Valley Sassaman and his colleagues note that, "the Late Woodland is difficult to delineate typologically from its antecedent or from the subsequent Mississippian period" (Sassaman et al. 1990:14). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

## Historic Overview

Like many South Carolina counties, Lancaster lacks anything that might be called a thorough history. Most of the available document focus on genealogical research associated with various families or cemeteries and the *Historic Site Survey, Lancaster County* prepared by the Catawba Regional Planning Council in 1976 offers only a brief introduction to the history of the region. A more comprehensive survey is offered by Schneider and Jackson (1986).

Mills (1826:595) notes that the earliest settlement in Lancaster was by immigrants from Pennsylvania and Virginia about 1745 at a place called Waxhaws, near the Catawba settlements. While sheltered by the Catawba, settlement to the west, toward the Cherokee lands was slow and the area was not intensively settled until after 1761 – after the series of three "wars" waged by South Carolina on the Cherokee (see Hatley 1993). Although the area was largely claimed by the Catawba, this created little concern and Mills noted that the Waxhaw settlers became "rid of their powerful and dangerous neighbors" through a smallpox epidemic about 1750 (Mills 1866:595).

Mouzon's 1775 *An Accurate Map of North and South Carolina* (Figure 7) shows virtually no settlement along what was known then as the West Branch of Lynches Creek. The project area is, however, is in close proximity to the main road leading north from Camden. In contrast there are a number of settlements on the uplands of the East Branch of the Lynches, probably attracted to the area by the broad alluvial floodplains suitable for cultivation.

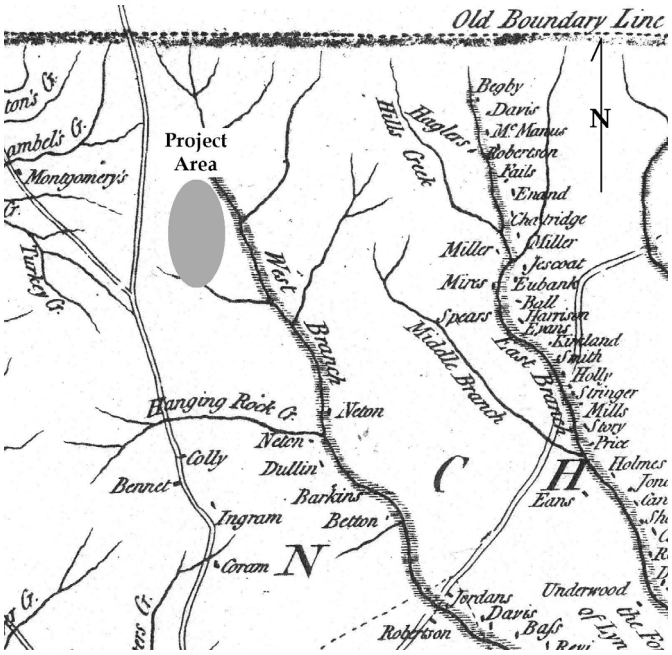


Figure 7. Portion of Mouzon's 1775 map of South Carolina showing the project area.

Like much of the upcountry, the American Revolution was characterized a bloody series of partisan skirmishes in Lancaster. On May 29, 1780 the Battle of the Waxhaws, also known as Buford's Massacre, occurred near the City of Lancaster. A regiment of Virginians, under Colonel Abraham Buford, had been on their way to reinforce patriot forces at Charleston when they heard that the city had fallen and turned back. They were intercepted by Colonel Banastre Tarleton, whose troops slaughtered the Americans as they attempted to surrender. This exceptional cruelty ended the passiveness of many backcountry settlers and began an aggressive backcountry campaign on both sides. Additional battles were fought at Hanging Rock (on July 30, 1780 and August 6, 1780) where the Americans successfully captured British supplies and at Waxhaw Church (on April 10, 1781).

After the Revolution, settlement in the area grew slowly, primarily as small communities were established along both overland trails and along the navigable rivers. Originally part of the Camden District, Lancaster was created in 1785, encompassing what are today Lancaster and Kershaw counties. Kershaw was split off only six years later, in 1791.

By the 1820s Lancaster's main town, Lancasterville, boasted 30 buildings and about 260 residents. Among the more impressive buildings were the court house, a jail (both built in 1823), and what Mills described as a "handsome brick academy" (Mills 1826:597). County-wide there were 5848 whites and 4473 African American slaves in 1820 – clear evidence of the importance of cotton, especially along the Catawba River. Cotton, of course, was greatly promoted in the South Carolina piedmont by the invention of the cotton gin in 1790.

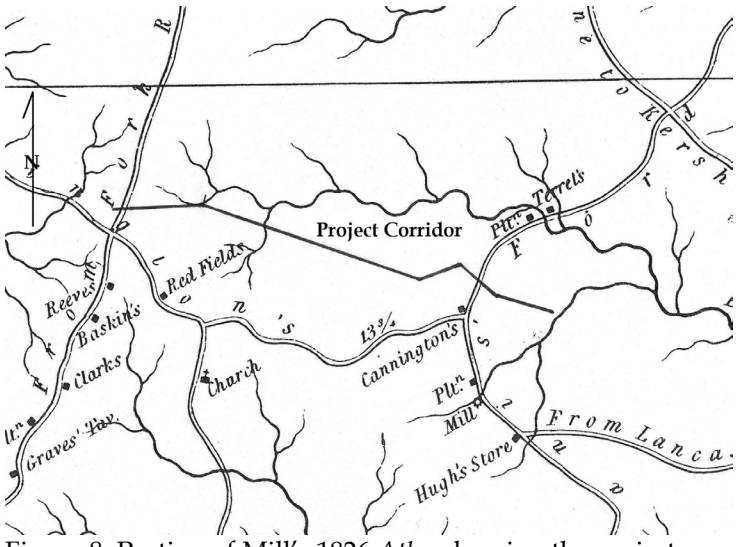


Figure 8. Portion of Mill's 1826 *Atlas* showing the project area in Lancaster District

Mills' *Lancaster District* shows that the road network continued to expand and with it settlements oriented to these access routes. Several settlements are shown within a mile of the project corridor, but none are within or

immediately adjacent to the project tract (Figure 8).

While the region's history focuses on cotton, there was another side of equal interest:

> Lancaster's history has been tinged with many religious vagaries, including legal recognition of witchcraft, and the Waxhaw Revival. Early in the nineteenth century a poor girl of Lancaster testified that Barbara Powers had converted her into a horse and had ridden her so incessantly that her health had suffered. The case was thrown out of court. At about the same time the Waxhaw Revival, offshoot of the Nationwide Great Revival, threw many of the county's staid Presbyterians into trances and ecstatic shouting (Writers' Program, Work Projects Administration 1941:310).

By 1850 the white population had held steady at 5,857 while the African American slave population had increased to 5,014 (DeBow 1854:302). It ranked 18th in cotton production, with 8,661 bales. This was far less than produced by neighboring York, Chester, Fairfield, or even Kershaw, but surpassed the production of Chesterfield County to the east, again documenting Lancaster's division between profitable upland cotton farms and the subsistence farms of the sand region. When the agricultural statistics are examined, Lancaster proves to be a leader in none of the various categories.

The 1865 Coast Survey Map of North and South Carolina primarily reveals the increase in mills and gold mines – reflecting the Carolina gold boom of the early to mid-nineteenth century.

Lancaster was largely quiet during the Civil War until Sherman's troops cut across the county just south of the project area on March 1, 1865 (*Atlas to Accompany the Official Records of the Union and Confederate Armies*, Plate 70, numbers 5 and 6). This undoubtedly caused considerable terror in the local community, as well as considerable loss of property.

In the aftermath of the Civil War, Lancaster County made efforts to diversify into textiles, but was never as successful as its neighbor, Chester County. In fact, by 1907 there was only one mill in the County – the Lancaster Cotton Mills, operated by LeRoy Springs – that had been formed in 1895. While not huge, the Lancaster operation was among the larger concerns in South Carolina, tied for fifth place for capital stock value and seventh in cotton consumed.

Nevertheless, farming continued to dominate the local economy. Although nearly 50,000 acres were planted in cotton, it was not the county's primary crop, ranking in bottom third of producers. In general, the county appears to be diversified, with farms producing orchard crops, corn, wheat, and oats (Watson 1907:576).

Lancaster County is at the edge of what has traditionally been called the Black Belt – the area of large plantations that formed the nucleus of tenancy. Heavily dominated by African Americans, this region was hardest hit by the effects of tenancy, both before and after the Great Depression (Goldenweiser and Truesdell 1924; Woofter 1936:3). Just west, however, was the Upper Piedmont, where plantations were "few, scattered, and small" (Woofter 1936:3) and tenancy was somewhat ameliorated.

The different history of the two areas is reflected by the average size of plantations in the Upper Piedmont and Black Belt – 211 acres compared to 275 acres. There was also a clear difference in owner incomes. In the Upper Piedmont the average net income for the owner

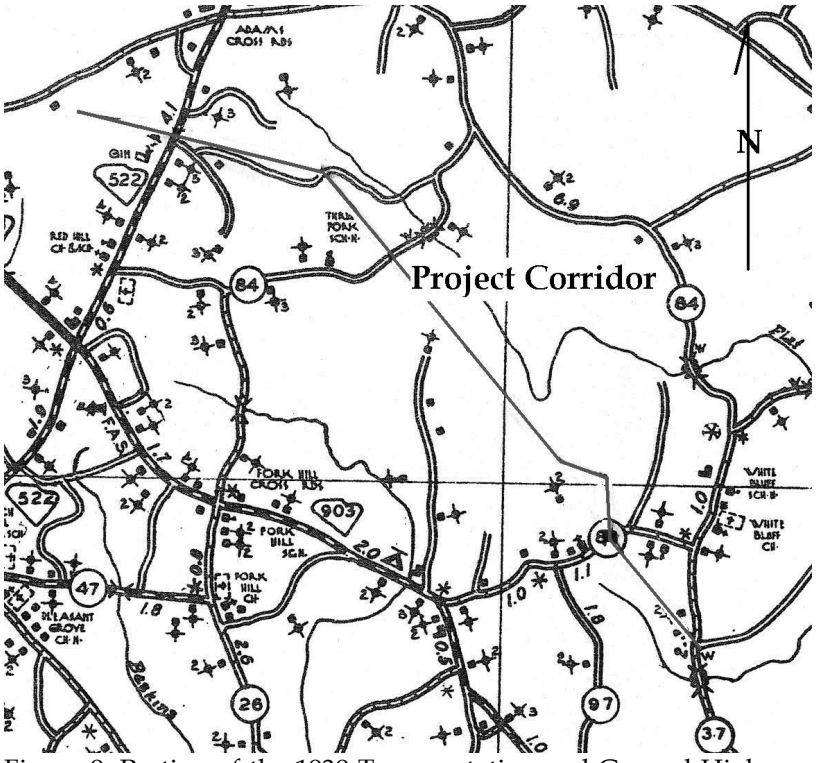


Figure 9. Portion of the 1939 Transportation and General Highway Map of Lancaster County showing the project corridor.

was $1,710, compared to $1,462 for Black Belt owners.

Tenancy was also heavier in the Black Belt, accounting for 73% of the farmers, compared to only 63% in the Upper Piedmont. This, however, did not translate directly into income levels for tenants. In the Upper Piedmont croppers or sharecroppers had a net yearly income of $104, while share tenants' income was $170.[4] In the Black Belt, croppers did better, earning $127 per family, while the sharecroppers did appreciably worse, earning only $106 per year (Woofter 1936).

The 1939 *General Highway and Transportation Map* for Lancaster (Figure 9) reveals that much of the project area was still not densely settled. There was a gin and several farm units at the western origin of the transmission line, and a single farm unit is found south of the corridor in the central portion. There are also several farm units at S-37 at the southeastern terminus. Otherwise, the corridor suggests little settlement. Given what we know about the soils it is likely that this sparse settlement pattern was at least partially the result of soil damage and efforts to return much of the area to silvaculture.

As South Carolina gradually recovered from the depression of the 1930s (spurred on by World War II), Lancaster turned to industry. Much of the agricultural land was allowed to grow up in timber. Seven piedmont counties, including Lancaster, combined account for nearly 43% of the state's factory workers, although they hold only 30% of its population (Kovacik and Winberry 1987:193).

**Previous Archaeological Studies**

Lancaster has received relatively little archaeological attention. Derting and his colleagues, for example, list only 34 reports associated with the county, with 29 of these (or 85%) representing highway, transmission line,

[4] Cropper or share-croppers furnished their labor and half of the fertilizer necessary. The landlord furnished the land, a house, fuel, tools, working stock, seed and feed, and the other half of the fertilizer. The crop, minus advances, was split evenly between the cropper and owner. In contrast, share tenants or share renters, provided not only their labor and usually at least two-thirds of the fertilizer, but also the work stock, seed and feed, and tools. The owner provided the land, a house, fuel, and the remainder of the fertilizer. In such arrangements the owner received between one-fourth and one-third of the crop, typically tied to the amount of fertilizer provided, while the tenant received the remainder.

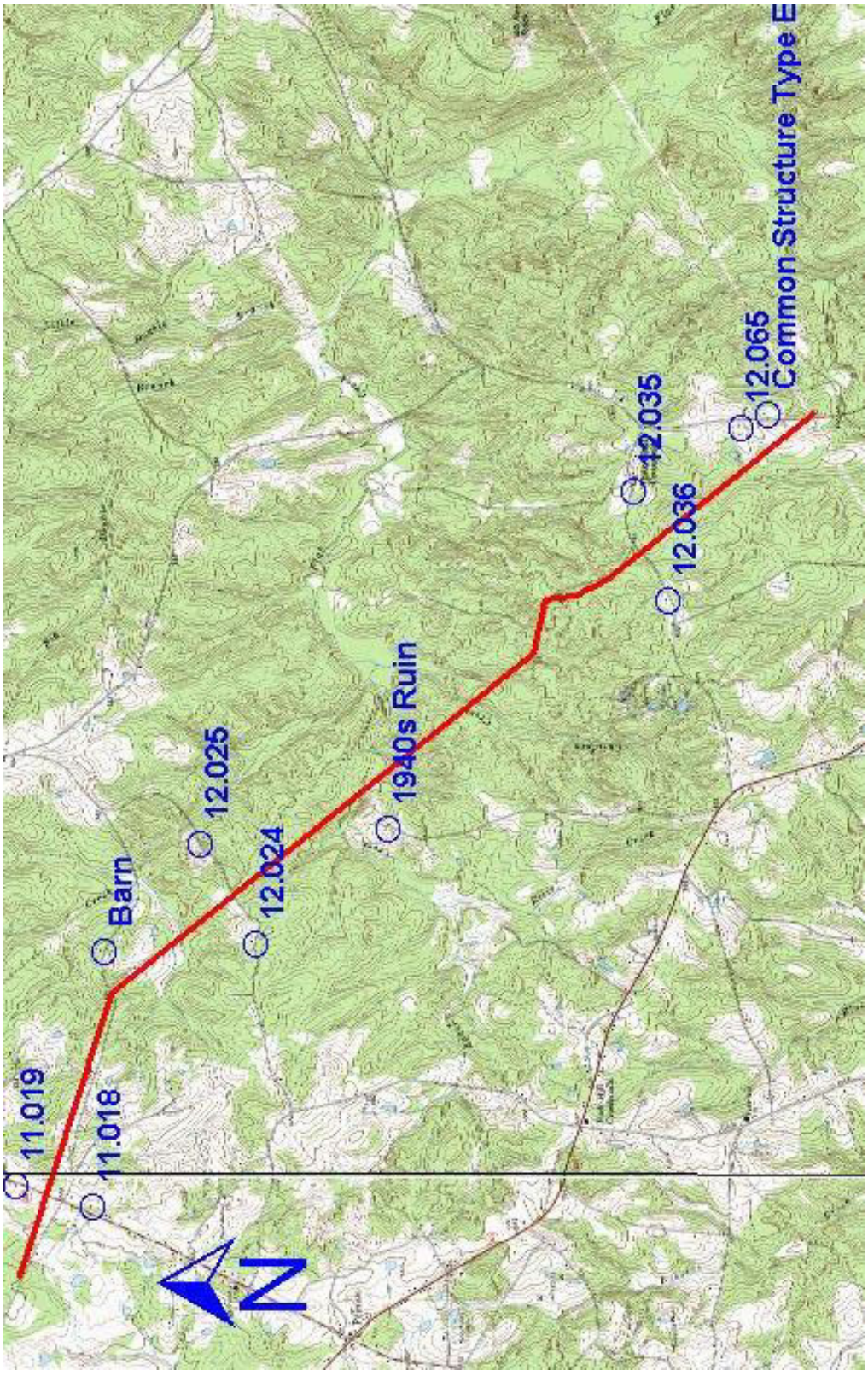


Figure 10. Location of previously identified architectural sites within the 0.5 mile APE for the study corridor.

reservoir, or sewer surveys (Derting et al. 1991). Although dated, this indicates that the attention has been focused on relatively narrow, constrained corridors, with only minor attention devoted to the area's rich prehistoric and protohistoric resources.

As previously mentioned, no archaeological sites have been identified in the 0.5 mile APE associated with this project. This, however, only speaks to the infrequency of archaeological studies. The only previous project in this immediate area, in fact, is Chicora's previous survey of the proposed substation lot at the northwest origin of the corridor. This survey failed to identify any cultural remains (Trinkley and Southerland 2003).

**Previous Architectural Surveys**

While there was an early historic survey of the county by the Catawba Regional Planning Council in 1976, a comprehensive architectural survey was not conducted until the 1986 work by Preservation Consultants (Schneider and Jackson 1986). That study recorded seven standing structures (11.018, 11.019, 12.024, 12.025, 12.035, 12.035, and 12.065) – all were determined not eligible for inclusion on the National Register.

In addition, the field maps also recorded four additional features – a barn, a ruin, a 1940s ruin, and a structure classified as "Type E." As was common practice at the time, these were noted on field maps, but no architectural survey cards were completed since the structures, during consultation with the State Historic Preservation Office staff, were determined not to be worthy of additional recordation efforts.

These structures are shown on Figure 10 and were revisited during this study.

# METHODOLOGY

**Archaeological Field Methods**

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along the centerline of the corridor, which was staked at the time of the survey. Since the corridor is only 75 feet in width, a single transect was deemed satisfactory.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially along the corridor (corresponding to the station number). Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. For small or very recent sites these tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. For larger sites or sites where we felt there was a potential for National Register eligibility, shovel tests would incorporate the entire site, including the portion outside of the project corridor. Again, shovel tests would be placed at 25 to 50 foot intervals.

The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

These proposed techniques were implemented with no modifications. A total of 330 shovel tests were excavated along the centerline of the corridor. Each of the four sites identified during the survey required additional, close interval testing.

The GPS positions were taken with a Garmin GPS 76 rover that tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a frequent problem. This was a vital concern for the study area.

GPS accuracy is generally affected by a number of sources of potential error, including errors with satellite clocks, multipathing, and selective availability. Satellite clock errors can occur when the satellite's clock is off by as little as a millisecond, or when a slightly askew orbit results in a distance error. Multipathing occurs when the signal bounces off trees, chain-link fences, or bodies of water. Multipathing was probably a significant source of error for this study since much of the site corridor was in a forest of pines and hardwoods. The source of most extreme GPS errors is selective availability (SA), the deliberate mistiming of satellite signals by the Department of Defense. This degradation results in horizontal errors of up to 100 m 95% of the time, although the error may be as much as

Figure 11. Shovel testing across an open pasture area.

300 m. Nevertheless, the DOD has turned off selective availability. We have previously determined the 3D[1] and DGPS readings with the Garmin 76 were identical. Therefore, we relied on 3D navigation mode, with expected potential horizontal errors of 6-10 m or less.

**Architectural Survey**

As previously discussed, we elected to use a 0.5-mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects that appeared to have been constructed before 1950. Typical of such projects, this survey recorded only those which have retained "some measure of its historic integrity" (Vivian n.d.:5) and which were visible from public roads.

For each identified resource we would complete a Statewide Survey Site Form and at least two representative photographs were taken. The Survey Staff of the S.C. Department of Archives and History would assign permanent control numbers at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History.

**Site Evaluation**

Archaeological sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

> the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a. that are associated with events that have made a significant contribution to the broad patterns of our history; or

[1]A basic requirement for GPS position accuracy is having a lock on at least four satellites, which places the receiver in 3D mode. This is critical – as an example, positions calculated with less than four satellites can have horizontal errors in excess of a mile, or over 1,600 m.

> b. that are associated with the lives of persons significant in our past; or
>
> c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d. that have yielded, or may be likely to yield, information important in prehistory or history.

*National Register Bulletin 36* (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

> ▪ identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;
>
> ▪ identification of the historic context applicable to the site, providing a framework for the evaluative process;
>
> ▪ identification of the important research questions the site might be able to address, given the data sets and the context;
>
> ▪ evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and
>
> ▪ identification of important research questions among all of those that might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site's ability to address significant research topics within the context of its available data sets.

For architectural sites the evaluative process was somewhat different. Given the relatively limited architectural data available for most of the properties, we focus on evaluating these sites using National Register Criterion C, looking at the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials – the physical items used on and in the property – are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

**Laboratory Analysis**

The cleaning and analysis of artifacts was conducted in Columbia at the Chicora Foundation laboratories. These materials have been catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site forms for the identified archaeological sites have been filed with the South Carolina Institute of Archaeology and Anthropology. Field notes have been prepared for curation using archival standards and will be transferred to that agency as soon as the project is complete. Photographic materials are either digital or color print and are not archival – they are being retained by Chicora Foundation.

Analysis of the collections followed professionally accepted standard with a level of intensity suitable to the quantity and quality of the remains. In general, the temporal, cultural, and typological classifications of prehistoric materials were defined by such authors as Coe (1964), Yohe (1996), Blanton et al. (1986), and Oliver et al. (1986). Historic materials, generally late nineteenth or early twentieth century, were classified using such authors as Jones and Sullivan (1980) for glass and Adams (1980), Bartovics (1978), and Price (1979) for ceramics.

# SURVEY RESULTS

The archaeological survey identified four sites, 38LA463 – 38LA466 (Figure 12). All are recommended not eligible for inclusion on the National Register of Historic Places.

Of the seven recorded architectural sites, five (11.018, 11.019, 12.035, 12.036, and 12.065) were still standing and this evaluation concurred with the previous recommendations of all being not eligible. One structure (12.024) is today in ruins and the final structure has been completely removed (12.025).

**38LA463**

Site 38LA463 is a subsurface prehistoric lithic scatter located on a north facing ridge top and side slope at an elevation of about 675 feet AMSL. A GPS coordinate within the current survey corridor is 534771E 3839873N (NAD27 datum).

The site, located off Logging Road, was discovered through a positive shovel test at Station 277+87 (500R550). This test produced one quartz flake. Close interval testing at 25-foot intervals along the cardinal directions produced an additional 31 positive tests (39% of the total). Based on the shovel tests the site is estimated to measure 200 feet east-west by 175 feet north-south. Because of the pasture vegetation surface visibility is very low no surface collection was made.

All the artifacts were flakes except for two pieces of "black" glass (also known as olive glass). No other historic remains were found at the site and these container fragments appear to be intrusive, perhaps from subsequent farming activities during the nineteenth century.

Table 2.
Artifacts from 38LA463

| | Flakes, quartz | Flakes, metavolcanic | Glass, "black" | TOTAL |
|---|---|---|---|---|
| 400R425 | 3 | | | 3 |
| 400R450 | 2 | | | 2 |
| 425R425 | 2 | 1 | | 3 |
| 425R450 | 3 | | | 3 |
| 425R475 | 1 | | | 1 |
| 425R500 | 2 | 2 | | 4 |
| 450R400 | 2 | | | 2 |
| 450R425 | 4 | | | 4 |
| 450R450 | 3 | | | 3 |
| 450R475 | 2 | | | 2 |
| 450R500 | 2 | 1 | | 3 |
| 450R525 | 2 | | | 2 |
| 475R400 | 1 | | | 1 |
| 475R425 | 2 | | | 2 |
| 475R450 | 1 | | | 1 |
| 475R475 | 2 | | | 2 |
| 475R500 | 3 | 1 | 1 | 5 |
| 500R450 | 3 | 1 | | 4 |
| 500R475 | 2 | | | 2 |
| 500R500 | 3 | 1 | | 4 |
| 500R525 | 1 | | | 1 |
| 500R550 | 1 | | | 1 |
| 500R575 | 1 | 1 | | 2 |
| 525R525 | 1 | | | 1 |
| 525R550 | 3 | | | 3 |
| 525R575 | 1 | | | 1 |
| 525R600 | 2 | | | 2 |
| 550R550 | 2 | | 1 | 3 |
| 550R575 | 4 | | | 4 |
| 550R600 | 2 | | | 2 |
| 575R550 | 1 | | | 1 |
| 575R575 | 5 | | | 5 |
| TOTAL | 69 | 8 | 2 | 79 |

Soils in the area usually resemble Appling fine sandy loams. These soils have an Ap horizon of grayish brown (10YR5/2) fine

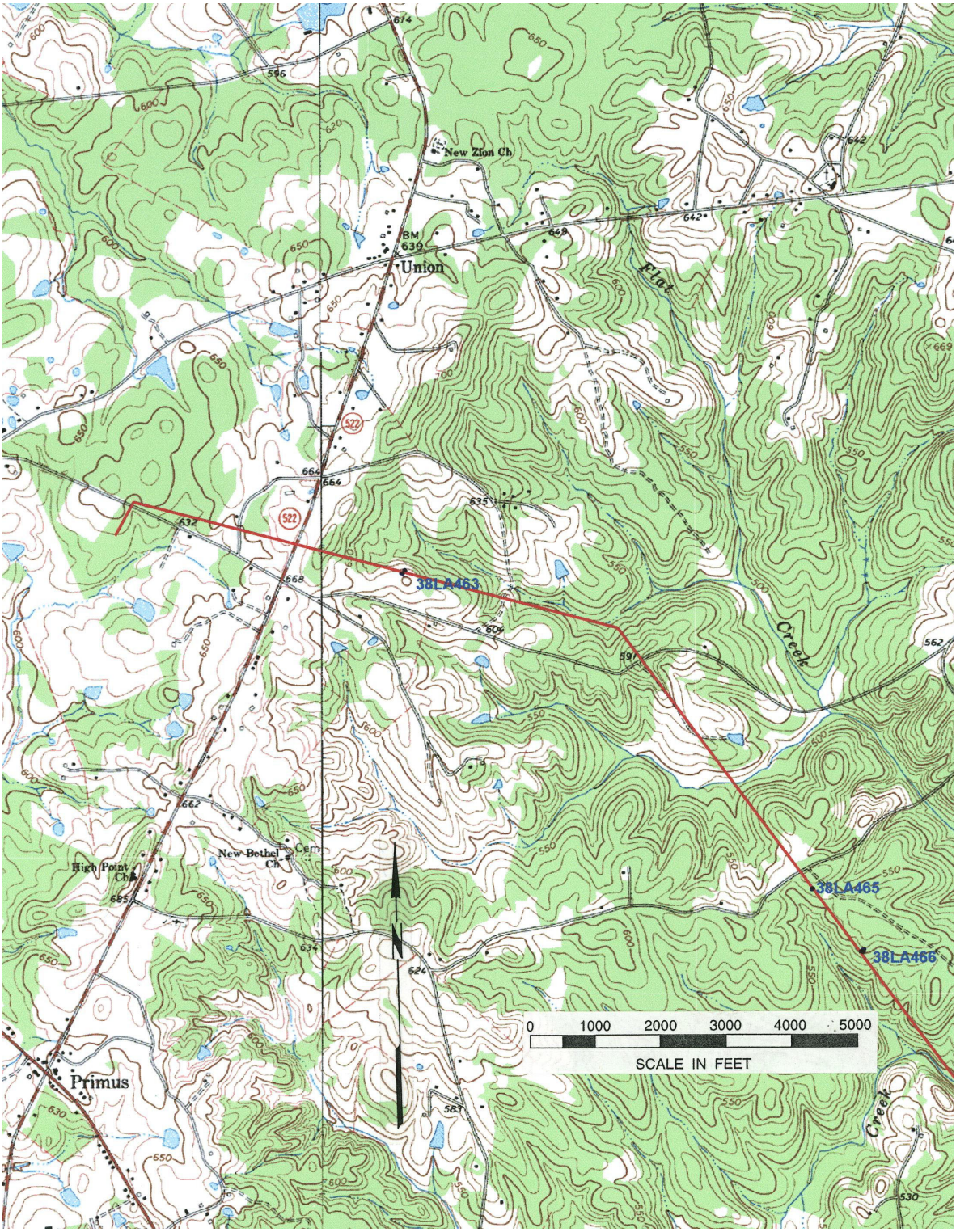


Figure 13. West end of the survey corridor showing identified sites 38LA463, 465, and 466 (base map is USGS Taxahaw 7.5').

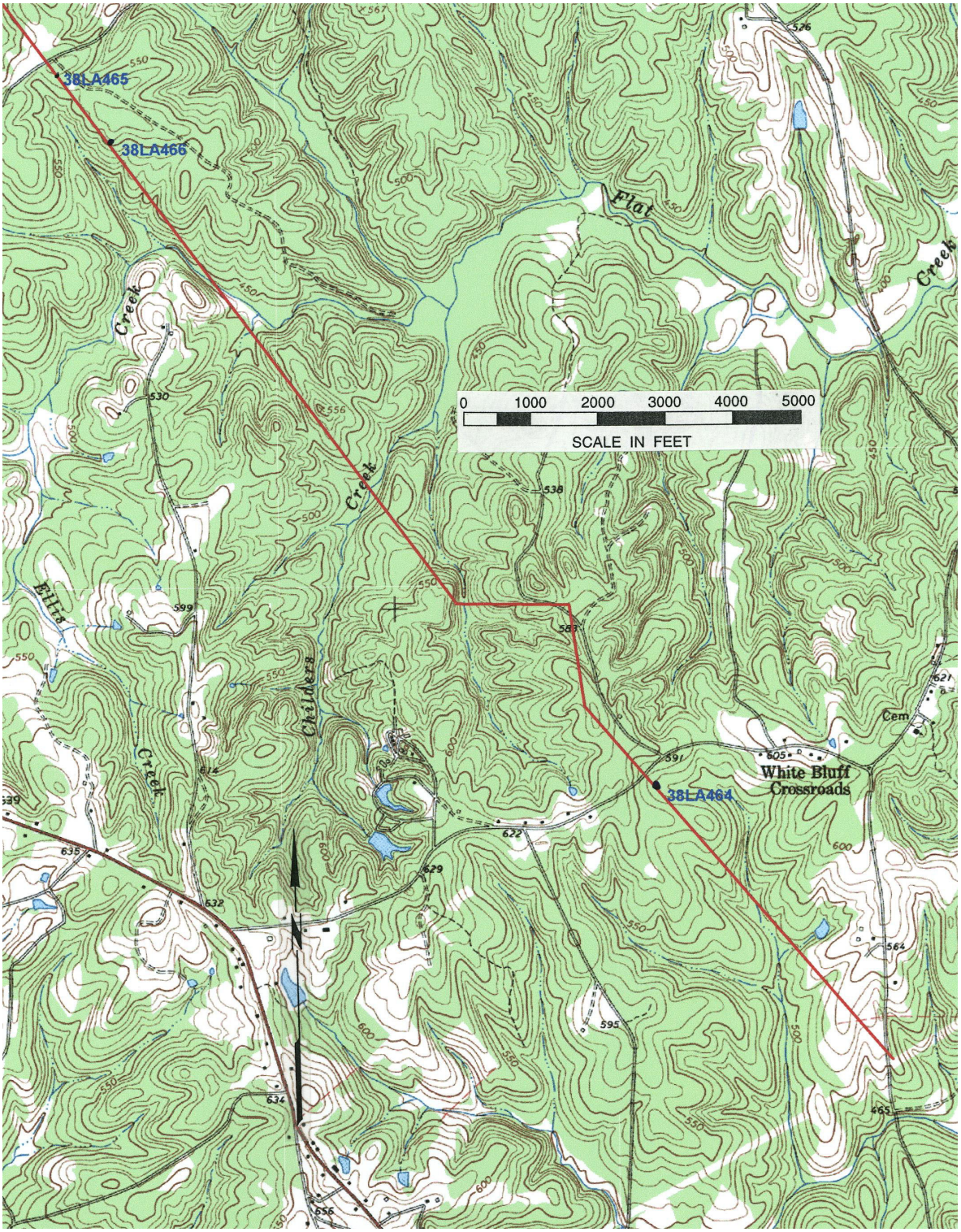


Figure 14. East end of the survey corridor showing identified sites 38LA464 (base map is USGS Taxahaw 7.5′).

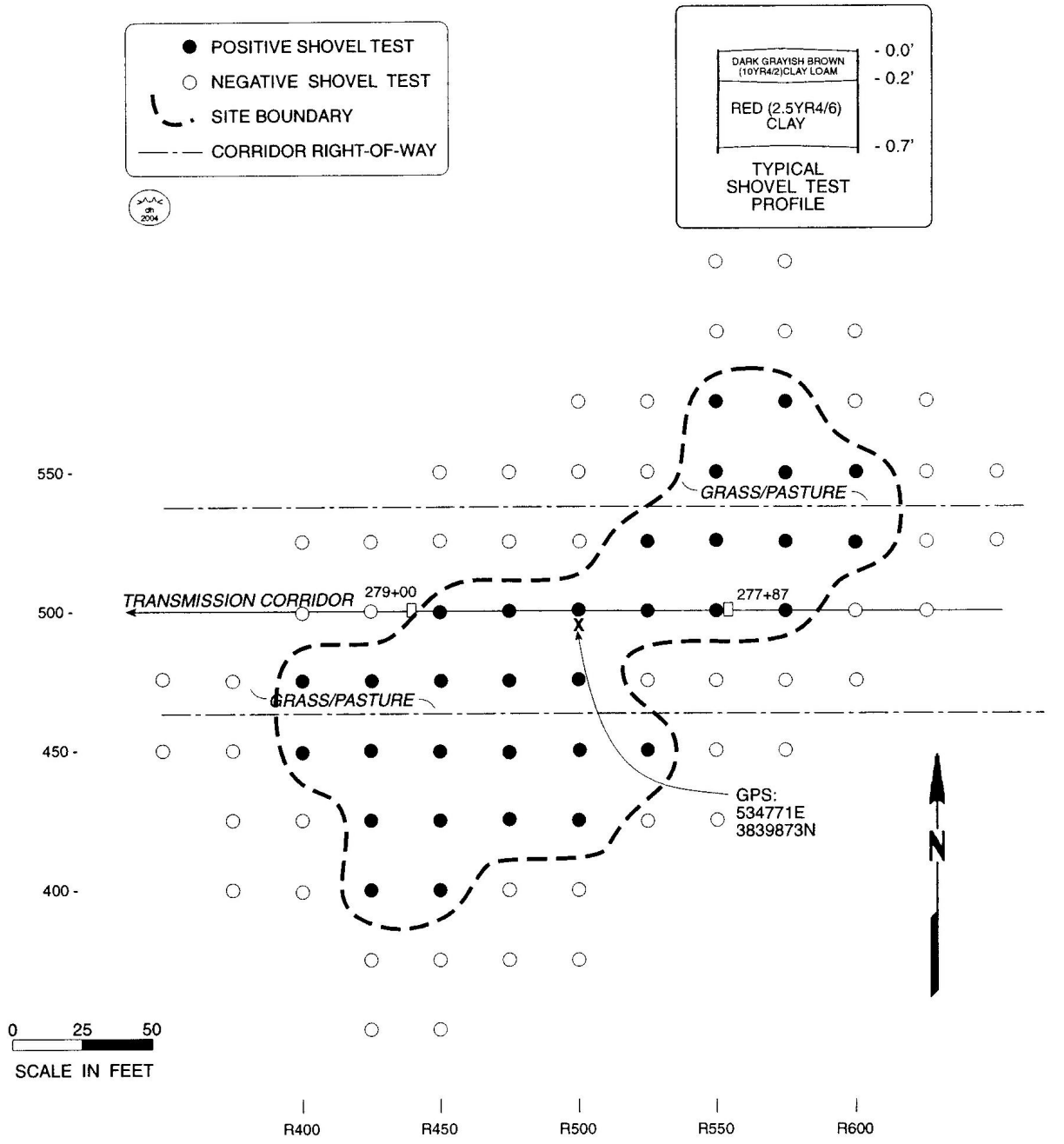


Figure 15. Sketch map and typical shovel test profile for 38LA463.

sandy loam to a depth of 0.6 foot over a strong-brown (7.5YR5/8) clay to a depth of 2.5 feet. The subsoil consists of a red (2.5YR5/6) clay, which can occur to a depth of 3.8 feet. The soils at the site, however, generally had a top layer of grayish brown clay loam to a depth of 0.2 foot over a red clay. This shows that upward of 2.5 feet of soil has been eroded. The currently grassed meadow had also been cultivated at one time and all the artifacts were found in the top 0.2 foot of soil.

The 77 prehistoric flakes include quartz and metavolcanic materials. The two pieces of black glass, typical of the nineteenth century (Jones and Sullivan 1985:14), were the only historic evidence found and are inconsequential to the evaluation of this site.

The historic data sets at the site are limited to two bottle fragments; prehistoric data sets are limited to flakes. For this prehistoric assemblage no tools or diagnostic items were recovered. There is no indication of any site stratigraphy or features and there appears to be exceptional erosion. Consequently, site integrity is rated very low.

The site does not appear to contain either the data sets, or the preservation, necessary to address significant research questions. Consequently, the site is recommended not eligible for inclusion on the National Register and no additional management activities are recommended pending the review of the State Historic Preservation Office.

**38LA464**

Site 38LA464 consists of a subsurface scatter of prehistoric lithics situated on a ridge side slope at an elevation of about 580 feet AMSL. A central UTM coordinate is E539358 N3835175 (NAD27 datum).

The site, located just south of Mining Road (S-86), was first discovered through a positive shovel test at Station 55+08 (500R500). This shovel test produced one quartz flake. Close interval testing was performed at 25-foot intervals, until two consecutive negative shovel tests were found. This testing provided complete site coverage with 50 shovel tests being excavated. Of these 13 were positive (representing 26% of the tests). A total of 20 artifacts were found, all representing flakes (Table 3). Based on the distribution of these remains the site is estimated to measure about 125 feet east-west by 75 feet north-south. About a third of this site is found on the project corridor, with the remainder extending off to the east (Figure 14).

Soils resemble Cecil clay loams, which generally have an Ap horizon of light yellowish brown (10YR6/4) fine sandy loam to a depth of 0.4 foot over a yellowish-red (5YR5/6) sandy loam to a depth of 0.6 foot. Beneath these horizons is a layer of red (2.5YR4/8) clay loam to a depth of 2.2 feet and the subsoil is a red (2.5YR4/6) clay that can occur to a depth of 3.7 feet. However, the soils at the site were severely eroded, leaving a 0.7 foot layer of the red clay loam (which contained all of the recovered artifacts) over the clay. At least 1.0 foot of soil has been eroded from the site. Several bulldozed soil piles were noted in and around the site, which may account for at least some of the soil loss.

The flakes recovered include quartz, siltstone, and metavolcanic examples. No worked flakes, bifaces, or other tools were recovered. No diagnostic artifacts are present in the assemblage. Nor were any concentrations of materials, possibly suggestive of specialized activity areas, identified. No features (potentially recognized by darker soils, clusters of fire cracked rock, concentrations of artifacts, or deeper deposits) were identified in the shovel testing. Consequently, the only data sets present are limited and not particularly useful for addressing significant research questions.

In addition, there is clear evidence of erosion at the site, with at least a foot of the original soil lost. The presence of bulldozer push

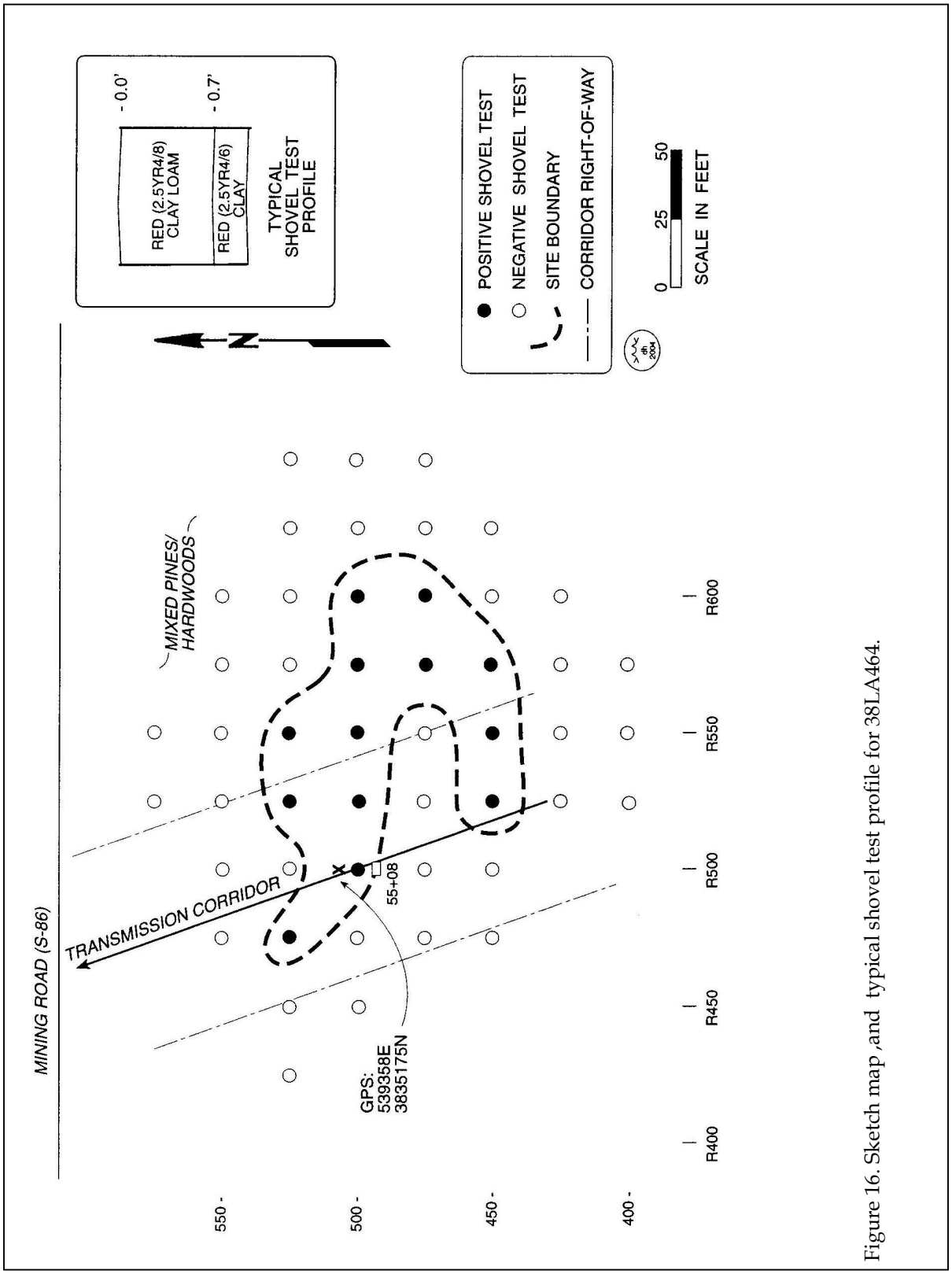


Figure 16. Sketch map ,and typical shovel test profile for 38LA464.

Table 3.
Artifacts recovered from 38LA464

| Shovel Test | Quartz flake | Metavolcanic flake | Siltstone flake |
|---|---|---|---|
| 450R525 | | 1 | |
| 450R550 | 2 | | 1 |
| 450R575 | 3 | | |
| 475R575 | 1 | | |
| 475R600 | 1 | | |
| 500R500 | 1 | | |
| 500R525 | | 1 | |
| 500R550 | 3 | | |
| 500R575 | | 1 | |
| 500R600 | 1 | | |
| 525R475 | 1 | | |
| 525R525 | | 2 | |
| 525R550 | 1 | | |

piles also indicates additional disturbance. The site has been significantly affected and this, too, reduces the potential of the site to address significant research questions.

This site appears to represent a small, diffuse scatter of flakes resulting from tool maintenance, probably during the Archaic (although no diagnostic remains are present). The side slope setting may reflect a kill site or temporary camp. Regardless, because of the site's inability to address significant research questions and damaged site integrity, it is recommended not eligible for inclusion on the National Register of Historic Places. No additional site management activities are recommended pending the review of the State Historic Preservation Office.

Figure 17. Rock pile just beyond the limited of 38LA465.

**38LA465**

Site 38LA465 consists of a subsurface historic ceramic scatter and prehistoric lithic scatter. The site is found on a ridge side slope at an elevation of about 560 feet AMSL. A central UTM coordinate is 536623E 3838400N (NAD27 datum).

Shovel tests were performed along the center line of the corridor with a shovel test positive at Station 197+91 (100R100). This test produced one piece of alkaline glazed stoneware and two quartz flakes. Shovel tests were performed at 25-foot intervals in the cardinal directions until two consecutive negative tests were encountered. A total of 14 tests were excavated with two being positive (14%). The other positive shovel test, at 75R100, contained one piece of alkaline glazed stoneware and two quartz flakes.

Shovel tests in this area usually produce Georgeville silty clay loams. These soils have an A horizon of yellowish brown (10YR5/4) silt loam to a depth of 0.3 foot over a yellowish red (5YR5/8) silt loam to 0.6 foot in depth. The subsoil consists of a red (2.5YR4/8) silty clay that occurs to a depth of 2.6 feet. However, the soils at the site had a 0.5 foot layer of dark grayish brown (10YR4/2) loamy clay (that contained all of the recovered artifacts) over a

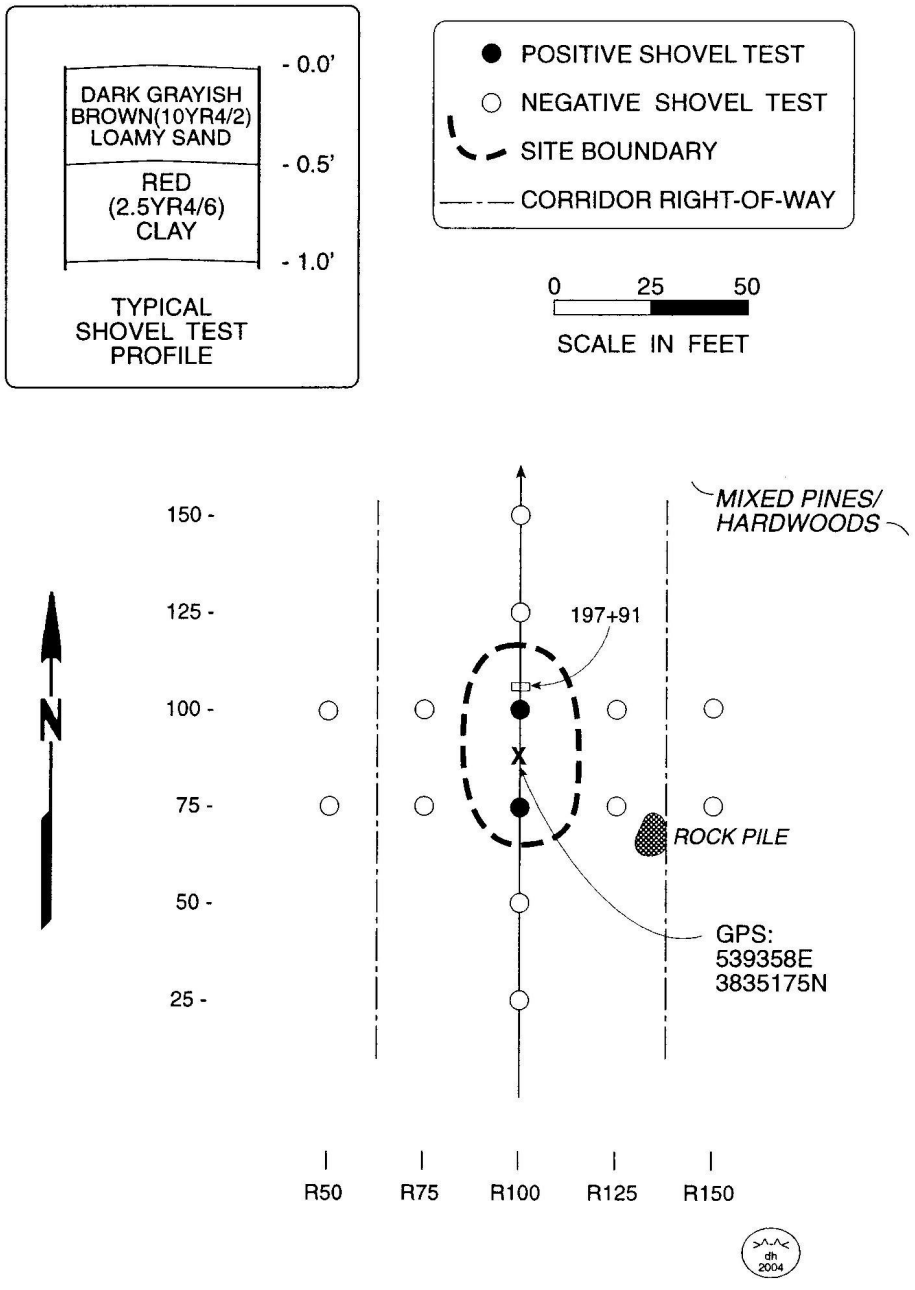


Figure 18. Sketch map and typical shovel test profile of 38LA465.

red (2.5YR4/6) clay. This inconsistency may be due to cultivation in the area.

A rock pile, measuring approximately 10 feet by 8 feet by 2 feet in height, was found in proximity to the site. No artifacts were found in context with the rock pile. Farmers, however, have been known to remove rocks from their fields before plowing and piling them out of the way. Such sites are common in the Piedmont, being frequently identified during surveys. Given the nature of the soil and nearby farmsteads, this seems a plausible explanation.

The estimated site dimensions, not including the rock pile, are approximately 50 feet north-south by 35 feet east-west. The site is entirely confined to the project corridor.

Both prehistoric and historic data sets are limited – there is no indication of a historic structure or dump site, no indication of features, and no evidence of any nearby site complex. Similarly, the prehistoric data sets are also limited to flakes. The soil profile suggests some degree of disturbance, by either erosion or cultivation.

We do not believe these remains have the ability to address significant prehistoric or historic research questions. As a result, we recommend the site not eligible for inclusion on the National Register of Historic Places. No additional management activities are recommended, pending the review by the State Historic Preservation Office.

**38LA466**

Site 38LA466 is a late nineteenth to early twentieth century scatter. The site is located on a south facing ridge side slope at an elevation of about 540 feet AMSL. A UTM coordinate along the center line of the corridor is 536886E 3838080N (NAD27 datum).

The site was first discovered when the shovel test at 184+41 (500R500) was positive, producing one piece of undecorated whiteware. Close-interval shovel testing was conducted at 25-foot intervals along the center line of the corridor and to the east and west to find the approximate dimensions of the site. Seven of the 45 shovel tests were positive (15%). As a result of this work we estimate the site to measure about 200 feet east-west by 100 feet north-south, with the site appearing to spread down slope.

Soils in the area represented Tatum silty clay loams. These soils have an A1 horizon of light brown (7.5YR6/4) loam to a depth of 0.2 foot over a reddish-brown (5YR5/4) sandy clay loam to a depth of 0.6 foot. The subsoil is a red (2.5YR5/6) clay that can occur to a depth of 1.7 feet. Soils in the site area, however, generally produced a dark reddish brown (2.5YR3/3) loamy clay to 0.3 foot in depth over a red (2.5YR5/6) clay. Some of the shovel tests also produced a dark grayish brown (10YR4/2) loamy clay to 0.4 foot in depth over a red clay, possibly indicating cultivation or old terracing activity on this side slope. In any event, it appears there has been significant erosion over all of the site. Artifacts were found in the top 0.3 to 0.4 foot of soil.

In addition to shovel testing, a 2 x 2 foot test unit was excavated at 500R610. The soil profile consisted of a dark grayish brown (10YR4/2) loamy clay to a depth of 0.4 foot over a yellow (10YR7/6) clay. Artifacts were found in the top 0.4 foot of soil – limited to the remnant A horizon. The size of the artifacts was small and there was no indication of distinct artifact clusters or features. The small size of the specimens tends to support the interpretation of cultivation and/or terracing.

As previously mentioned, the artifacts date from the late nineteenth to the twentieth century. For example, manganese glass was common in the late nineteenth century (Jones and Sullivan 1985:13), while an applied print Pepsi bottle (seen on the surface, but not collected), was not produced until the late 1930s and early 1940s (Jeter 1987:30).

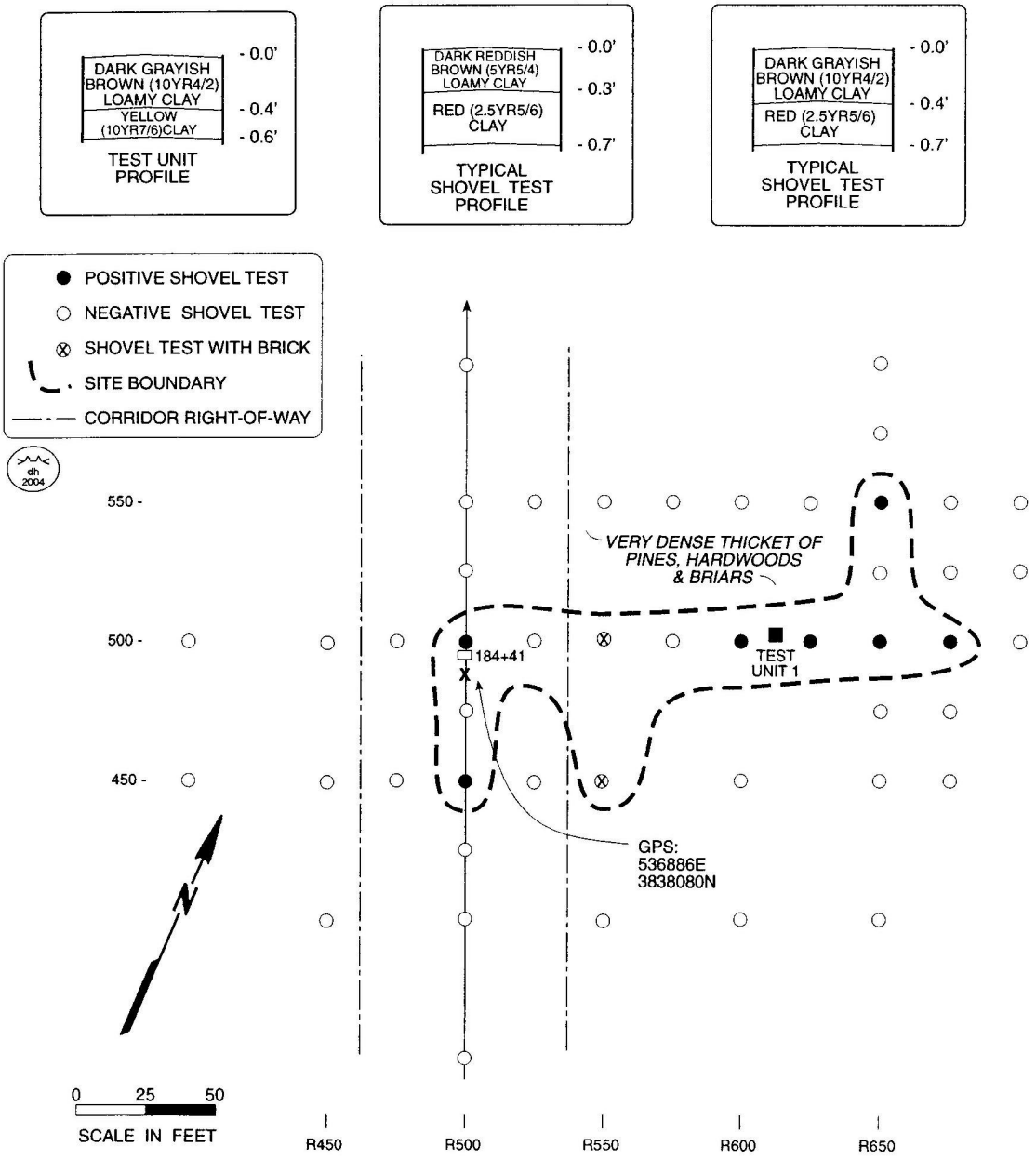


Figure 19. Sketch map, typical shovel test profile, and profile of Test Unit 1 at 38LA466.

Table 4.
Artifacts from 38LA466

| | 450 R500 | 500 R500 | 500 R600 | 500 R625 | 500 R650 | 500 R675 | 550 R650 | Test Unit 1 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| Kitchen Group | | | | | | | | | |
| Whiteware, undecorated | 2 | 1 | 1 | | 1 | 1 | | 2 | 8 |
| Stoneware, Bristol exterior, Albany interior | | | | | | | | 1 | 1 |
| Stoneware, Bristol with cobalt coloring | | | | | | | | 1 | 1 |
| Glass, clear | | | | 2 | 2 | 1 | 1 | 4 | 10 |
| Glass, manganese | | | | | 2 | | | 1 | 3 |
| Glass, aqua | 1 | | | 1 | 1 | | | | 3 |
| Glass, milk | | | | 1 | | | | | 1 |
| Architecture Group | | | | | | | | | |
| Machine cut nail fragment | | | | | | | | 1 | 1 |
| TOTAL | 3 | 1 | 1 | 4 | 6 | 2 | 1 | 10 | 28 |

While a date range was identified for the site, the data sets are limited to a very low density of kitchen related items and an even lower density of architectural remains. The positive shovel tests are scattered and there does not appear to be an identifiable concentration of artifacts. There were no above or below grade features identified.

In addition, close to 1.0 foot of the original soils are eroded perhaps due to the slope or previous land use activities. The USDS Soil Survey for Lancaster County reports that erosion is over 25% in this area (Rogers 1973). In fact, the closest ridge top, in this area of very dense pines, hardwoods, and undergrowth, is about 500 feet northeast of the site. The sporadic organization of artifacts suggests that the site was produced through down slope erosion, rather than through a domestic occupation.

Only two positive shovel tests were excavated within the survey corridor right-of-way. The majority of the positive tests started about 50 feet east of the corridor right-of-way.

It is unlikely this site contains the information needed to address significant research questions such as diet and status. The site is therefore recommended not eligible for the National Register of Historic Places. No additional management activity is recommended pending review of the State Historic Preservation Office.

## Results of Architectural Survey

The architectural survey consisted of two activities – one involved relocating the sites identified during the comprehensive county-wide survey (Schneider and Jackson 1986) and the other involved additional survey to ensure that no potentially significant structure had been missed by the earlier work.

Structure 11.018

Structure 11.019

Structure 12.024

Structure 12.035

Structure 12.036

Structure 12.065

Figure 21. Photographs of standing, previously recorded architectural sites in the project's 0.5-mile APE.

Previously identified and recorded sites included 11.018, 11.019, 12.024, 12.025, 12.035, 12.036, and 12.065. Of these all were still present except for 12.025, which has been demolished and entirely removed from the landscape. In addition, 12.024 was no longer standing, but is now in ruins.

Site 11.018 is a one-story frame residence five bays wide by two bays deep with a cross gable roof. There is a one-story shed porch roof across the façade. The current address is 1830 Rocky River Road. The structure was originally determined not eligible since it lacked individual merit and has been altered with the addition of aluminum siding. We recommend no change in that evaluation.

Figure 22. Building Type "E" located on the east side of Duckwood Road (S-204), 0.6 mile south of its junction with S-86 and S-37.

Site 11.019 is a one-story, "L"-shaped frame residence at 1539 Rocky River Road. The structure is four bays wide by three bays deep with a cross gable roof and a one-story hipped porch across the front. While relatively unaltered, the structure lacks architectural merit or distinctive attributes. It remains not eligible for inclusion on the National Register.

Site 12.024, standing (but abandoned) in 1986 has since totally collapsed and is now in ruins.

Site 12.025, standing (but in ruinous condition) in 1986 has since been completely removed. The location is still recognizable by landscape features such as a gravel drive and large oak, but otherwise no remains exist.

Site 12.035 is a 1-story frame residence with a square plan and tall hipped roof. There is a 1-story porch along the front elevation. The address is 3203 Mining Road. The structure has been modified by the addition of composition siding over the wood siding. In addition, this is common architectural style with no characteristic features. It was recommended not eligible and there is no change in our evaluation.

Site 12.036 is a one-story frame residence with an "L"-shape that is four bays deep and has a cross-gable metal roof. There is a one-story porch along the front and left side of the structure. This site was recommended not eligible since it was a common structure type with no individual merits. We concur with this previous assessment.

Site 12.065 is a 1½-story frame residence, rectangular in floor plan with a rear wing. The structure is three bays wide and two bays deep with a tall hipped roof. Since the original recordation the structure has suffered significant deterioration. The porch and its roof have largely collapsed and been removed. Windows are boarded up and the structure appears to be either abandoned or used for storage. It is approaching ruinous condition.

In addition to these seven standing structures (six of which are still standing), the field maps associated with the survey identified four additional structures. Each of these, while worthy of a field notation, was not considered sufficiently important for a card to be prepared and our only information is what is present on the field maps.

One was a barn – this building is no longer present and we could find no surface indications of its existence. A second structure, in 1986, was described as "ruins." No evidence of this structure was found. A third building was described as "40s ruins." This location is no longer publicly accessible and so we have no information on its condition. However, based on the condition of similar structures in the survey area, we suspect that it is no longer standing.

The final structure was labeled "E." This represents a structure type (one of eight) that the authors found commonly not only in the Lancaster mill village, but also in the countryside (Schneider and Jackson 1986:4). There was an "Addendum 1" that apparently documented and discussed these types. Unfortunately, this addendum can no longer be located by the Survey Staff.

This structure is still standing, although it is today in dilapidated condition and being used for storage (Figure 22). It was not worthy of recordation in 1986 and we do not believe that it merits further attention today.

The additional survey in the project APE failed to identify any potentially significant structures that were not included in the original survey.

# CONCLUSIONS

This study involved the examination of 6.25 miles of corridor, proposed for the use of a transmission line, in east central Lancaster County, South Carolina. This report, conducted for Mr. Tommy Jackson of Central Electric Power Cooperative, provides the results of the investigation and is intended to assist the company comply with their historic preservation responsibilities.

As a result of this investigation four archaeological sites, 38LA463-466, were identified within the study corridor. Two sites (38LA463 and 38LA465) are multicomponent, including both prehistoric lithics and sparse quantities of historic remains. One site (38LA464) exhibits only sparse prehistoric remains. The final site (38LA466) exhibits only historic remains, probably representing down slope erosion. All four sites are recommended not eligible for inclusion on the National Register –data sets are in each case limited and site integrity has been heavily impacted by erosion.

Lancaster County has received a comprehensive architectural survey and this study reviewed those sites previously identified for any change in their eligibility status and also conducted additional survey to determine if other structures worthy of recordation might be identified.

Previously identified and recorded sites included 11.018, 11.019, 12.024, 12.025, 12.035, 12.036, and 12.065. Of these all were still present except for 12.025, which has been demolished and entirely removed from the landscape. In addition, 12.024 was no longer standing, but is now in ruins. All of the structures had been previously assessed as not eligible and this current study fails to suggest any re-evaluations are in order.

The field maps associated with the survey identified four additional structures. Each of these, while worthy of a field notation, was not considered sufficiently important for a card to be prepared. These structures included a barn, two ruins, and a common structure type ("E"). The barn and one ruin are no longer present. The second ruin is no longer accessible (if it is even still extant). The last structure is still standing but was judged not worthy of recordation in 1986 and still lacks the merit and architectural integrity to warrant further study today.

No additional structures were identified and there are areas in the project vicinity where manufactured housing is becoming more common. Often these new housing units are replacing older family homes.

It is possible that archaeological remains may be encountered in the area during construction. As always, the utility's contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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